

**INVENTORY OF COAL GASIFICATION
PLANT WASTE SITES
IN ONTARIO**

VOLUME II

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PLANT WASTE SITES
IN ONTARIO**

VOLUME II

Prepared for
Ontario Ministry of the Environment
Waste Management Branch
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Toronto, Ontario

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FINAL REPORT

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APPENDIX A

Sources Used for Historical Record Search

SOURCES USED

Acronyms used to reference researched material appear in brackets (usually underlined) at the end of each entry:

Acronyms in the right hand margin provide references to where the source material was obtained: addresses and telephone numbers for each library or archives are located at the end of the bibliography.

General Sources used to compile multiple listings

- Archives of Ontario. RG 8. Provincial Secretary's Department, Bureau of Municipal Affairs. II 10 E, Correspondence of the Fuel Controller, 1922-1928. Box 2, File "Gas Rates". (PAO, RG8, II-10-E) PAO
- Archives of Ontario. RG 18, Commissions and Committees. D 1 19, Select Committee on Municipal Trading and Municipal Ownership or Operation of Public Utilities, 1903. Report (Toronto: L.K.Cameron, 1903). (PAO, RG18, D-1-19) PAO
- Archives of Ontario. RG 45, Ontario Energy Board. Series 8, By-laws and Franchise Agreements, 1875-1956. (PAO, RG45, Series8) PAO
- Archives of Ontario, RG 55, Companies Division.
I 2 D, Original Letters Patent. (PAO, RG55, I-2-D) PAO
- Baudouin, Philibert. Index to Incorporated Bodies and to Private and Local Law: Under Dominion, and Manitoba, Ontario and Quebec Statutes, Proclamations and Letters Patent ... [1777 - 1896]. Montreal: Beauchemin [1897]. (Baudouin) NL/PAO
- Canada. List of "Gas Works" in Census, 1871. Ottawa; Queen's Printer, 1872. Vol.III, p.422. (Census, 1871) PAC/PAO
- Canada. List of "Gas Works" in Census, 1881. Ottawa; Queen's Printer, 1882. Vol.D, p.462. (Census, 1881) PAC/PAO
- Canada. List of "Gas Works" in Census, 1891. Ottawa; Queen's Printer, 1892. Vol.IV, p.320-323. (Census, 1891) PAC/PAO
- Canada. List of "Gas Works" in Census, 1901. Ottawa; Queen's Printer, 1902. Vol.III, p.174-220, total p.278. (Census, 1901) PAC/PAO
- Canadian Gas Association, Directory of Canadian Gas Utilities. Scarsdale: Canadian Gas Association, 1955, 1960, 1965, 1970. (CGA) NL
- "Directory of Canadian Gas Companies", monthly listing in

Intercolonial Gas Journal of Canada. (Hamilton) 19127-1921, listings consulted: March 1, 1912, p. 100-1; May 1 1913, p. 180-1; January 1, 1914, p. 20-21; December 1, 1914, p.460-61; December 1, 1915, n.p.; December 1, 1916, n.p.; December 1, 1917, p.460-62; December 1, 1918, p. 462-64; March 1, 1919, n.p.; January 1, 1920, n.p., last complete list; "Table of Rate Changes of Canadian Artificial Gas Companies", partial list, issue December 1, 1920, n.p.; and "Compilation of Rates for Gas as Received by the Secretary, Canadian Gas Association, Nov. 1920", January 1, 1921, p.9-11, partial list. (ICGJ)

HPL/
MET-EMR

Dominion Bureau of Statistics, Division of Census of Industry and Merchandising. Canada's Chemical Industries by H. McLeod. Ottawa: 1947. Series 46-D-50. (DBS,McLeod)

Stats

Dominion Bureau of Statistics, Industry and Merchandising Division, Chemical Directory as of January, 1954. List "Gas and Illuminating Fuel", p. 33. Ottawa; Queen's Printer, 1954. Series 46-501. (ChemDir 1954)

NL

Dominion Bureau of Statistics, Industry and Merchandising Division, Chemical Directory as of December, 1960. List "Gas and Illuminating Fuel", p. 39. Ottawa; Queen's Printer, 1961. Series 46-501. (ChemDir 1960)

NL

Dominion Bureau of Statistics. Census of Industry, Mining, Metallurgical & Chemical Branch. The Coke and Gas Industry in Canada, yearly reports for the years 1940-1959. (All published the following year.). Series 45-203. Include specific lists of companies: 1940, p.18-20; 1941, no list given; 1942, p.15-17; 1943, p.15-17; 1944, p.15-17; 1945, p. 15-17; 1946, p. 14-16; 1947, p.14-16; 1948, p.15-17; 1949, p.B-16,17; 1950, p.B-16,17; 1951, p.B-16,17; 1952, p.B-16,17; 1953, p.B-16,17; 1954, p.15; 1955, p.16; 1956, p.16; 1957, p.B-16; 1958, p.19; 1959, p.16. (DBS-Coke&Gas)

Stats

Dominion Bureau of Statistics. Manufactures of the Non-Metallic Minerals in Canada, "Coke and By-Products" reports for the years 1919-1939. Series 44-D-22. Includes lists of plants: 1919-23, p.96; 1924, p.100; 1925, p. 121; 1926, p.124; 1927, p. 115; 1928-29, p.149; 1930-32, p.68; 1933-35, p.90; 1936-37, p.80; 1938-39, p.59. (coke-by product-NMM)

Stats

Dominion Bureau of Statistics. Manufactures of the Non-Metallic Minerals in Canada, "Illuminating and Fuel Gas" reports for the years 1919-1939. Series 44-D-22. Includes lists of plants: 1919-23, p.97; 1924, p.102; 1925, p.122; 1926, p.124; 1927, p. 115; 1928-29, p.149-150; 1930-32, p.68; 1933-35, p.90; 1936-37, p.80-81; 1938-39, p.60. (gas-NMM)

Stats

- "Gas Light Companies in the British American Provinces", monthly listing in the American Gas-Light Journal (New York), Vol. 5-9, 1863-67. Lists consulted: July 1, 1863, Vol.5 No.5,p.5; June 15 1864, Vol.5,No.5,p.108; July 3,1865, Vol.7,No.1,p.5; July 3, 1866, Vol.8,No.1,p.19; July 2, 1867, Vol.9,No.1, no lists given from this time forward. (AGLJ) CISTE
- Lovell, John & Son. Lovell's Business and Professional Directory of the Province of Ontario for 1882. Montreal: John Lovell & Son, 1882. (OntGaz 1882) PAC
- Might's Directory Co., Ontario Gazetteer and Directory, 1892-93. Toronto: Might's Directory Co., 1892. (OntGaz'92-93) NL
- Mitchell's Canada Classified Directory for 1865-66. Toronto: W.C.Chewett & Co., 1865. (CanGaz'65-66) PAC
- Mitchell's Canada Gazetteer and Business Directory for 1864-65. Toronto: W.C.Chewett & Co., 1864. (CanGaz 1864) NL
- Ontario Publishing & Advertising Co., Ontario Gazetteer and Directory, 1901-02. Ingersoll, Ont.; Ontario Publishing & Advertising Co., 1901. (OntGaz 1901) NL
- Polk, R.L. & Co., Ontario Gazetteer and Business Directory, 1886-87. Toronto: R.L. Polk & Co., 1886. (OntGaz'86-87) PAC
- Union Publishing Co. of Ingersoll, pub. Province of Ontario Gazetteer and Directory, 1910-11. Ingersoll: Union Publishing Co., 1910. (OntGaz 1910-11) NL

Sources for Specific Communities

are cited in files on the communities concerned.

Location of Sources

PAO	Archives of Ontario	77 Grenville St., Toronto, Ont. M7A 2R9 telephone: 416-965-4039
UWO	University of Western Ontario, Regional Collection	The D.B. Weldon Library, University of Western Ontario, London, Ont. N6A 3K7 telephone: 519-661-3161
PAC	Public Archives Canada	395 Wellington St., Ottawa, Ont.

K1A 0N3 613-995-5138

Stats Library, Statistics Canada

R.H. Coats Building, Tunney's Pasture,
Ottawa, Ont. K1A 0T6
telephone: 613-995-9034

CISTI Canadian Institute for Scientific
and Technical Information

Montreal Road, Ottawa, Ont. K1A 0S2
telephone: 613-993-9210

MET-EMR Library, Technology Information
Energy, Mines and Resources

580 Booth Street, Ottawa K1A 0E9
telephone: 613-995-4132

NL National Library of Canada

395 Wellington St., Ottawa, Ont.
K1A 0N4 613-995-9481

HPL Hamilton Public Library,
Special Collections

55 York Blvd., Hamilton Ont. L8R 3K1
telephone: 416-529-8111

APPENDIX B

Fact Sheets, City Location Maps and
Historical Maps for Gas Plants

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Barrie Street Address 17-31 Kempenfelt Drive between
Sampson and Duckworth Streets

MOE Region Central

MOE District Barrie NTS Map Sheet 31 D/S

Historical Maps Available 1907 - Fire Insurance Plan (Public Archives Canada, NMC 9292, 18/29); 1917 - Revision of 1907 Fire Insurance Plan (Regional Collection, University of Western Ontario), Sheet 18; 1931 - Revisions of 1923 Fire Insurance Plan (PAC, NMC 10714, 6/14); 1946 - Revisions of 1931 Fire Insurance Plan (PAC, NMC 9294, 6/14)

2. Site Identification:

Name Barrie Gas Works

Type of Facility Coal Carbonization 1878-1890, Water Gas 1890-1939

Operator(s) and Period(s) of Operation Barrie Gas Co. 1878-1928.

Corporation of the Town of Barrie 1928-1939

3. Site Characteristics:

Size (when operated) Small, 0.3 hectares

Present Land Use Vacant with excavation for proposed development

Planned Land Use Proposed condominium development

Present Occupant(s) Vacant

Present Land Use Adjoining Properties N-W-E-residential - single family dwelling
S-CN Railway and Kempenfelt Bay

Underground Utilities Storm and Sanitary sewers along Kempenfelt Drive

Sanitary trunk sewer along railway line

Soil Conditions Sandy silt and some gravel (fill?) to 1.5 m depth

Site Access Uncontrolled access

4. **Evidence of Buried Wastes:**

Operating Period 1878 to 1939 (61 years)

Excavation History late 1940's gas plant equipment removed and buildings demolished; 1985 excavation to depth of 4.5 m

Visible Wastes Visible pockets of contaminated soil encountered during 1985 excavation; Cinders and ash visible on-site

Odour During 1985 excavation of tank bases complaints were received from local citizens of objectionable odours

Water Pollution During 1985 excavation contaminated groundwater was observed (MOE)

5. **Resource Characteristics:**

Surface Water Kempenfelt Bay on Lake Simcoe

Proximity Borders south side of site

Use Recreational

Groundwater, Proximity Shallow

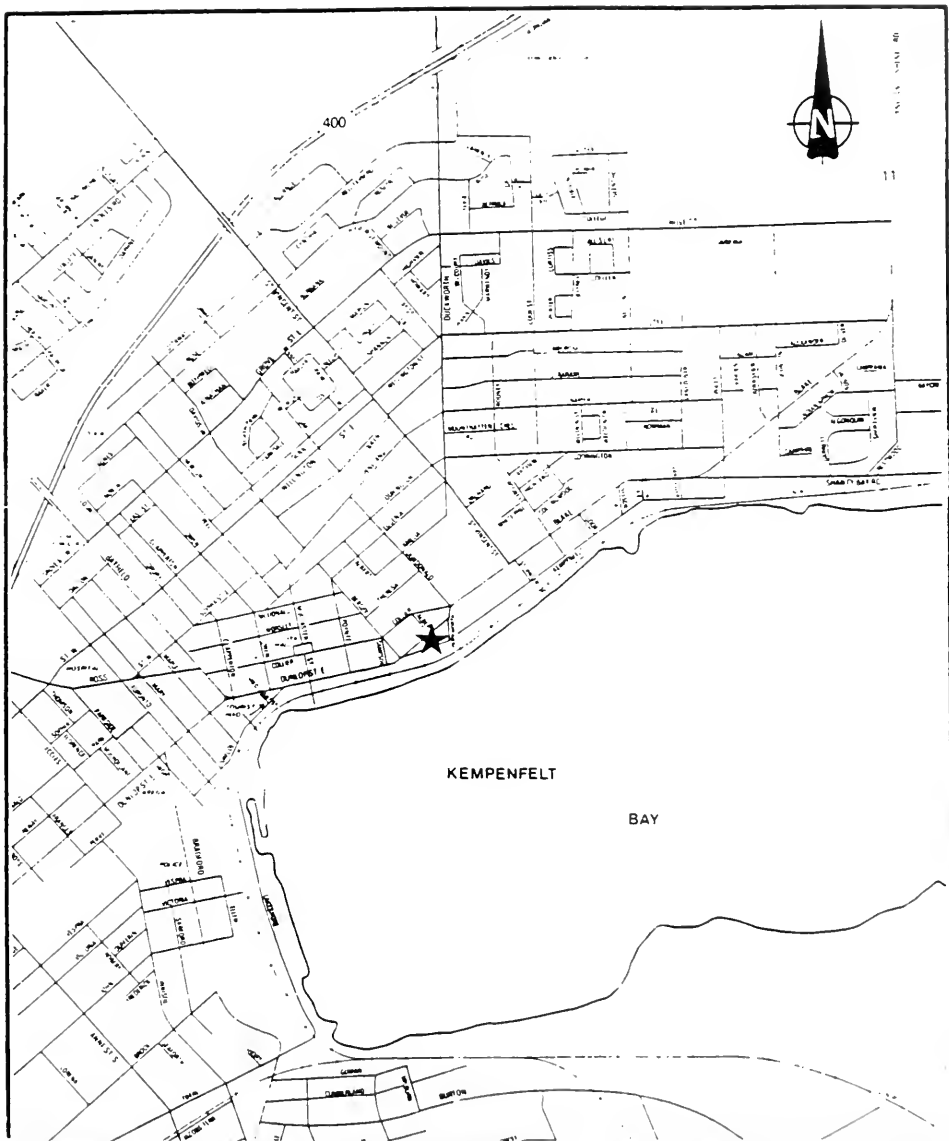
Use City Water Supply

Proximity of Existing Wells Nearest wells in Bayview #2 approx. 300 W of site

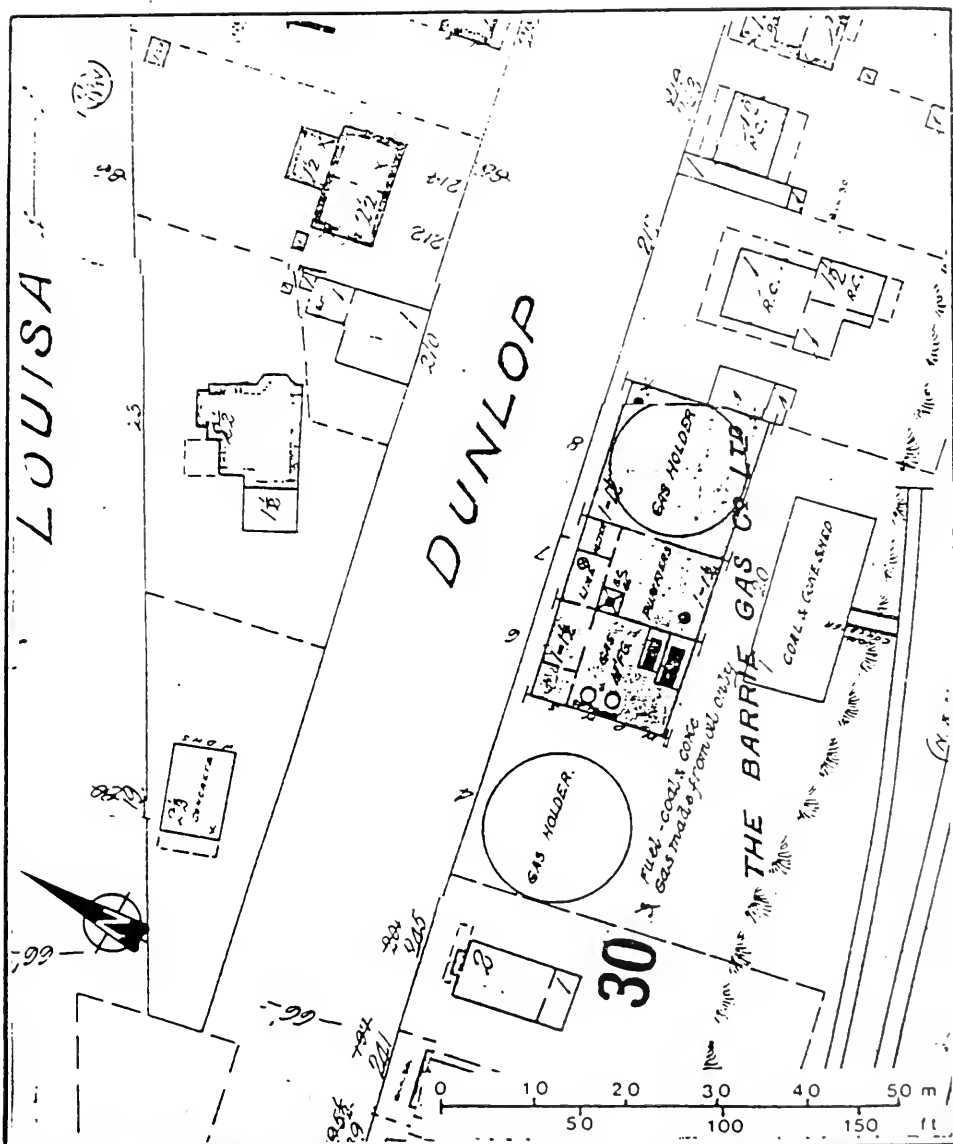
Site Investigations MOE analysis of contaminated soil and liquid in excavation

6. **Comments/Remarks:** Environmental Consultants to investigate site for owners, MOE to investigate off-site disposal area

7. **Off-Site Disposal Areas:** Excavated material disposed at Lot 8, Concession 1 Vespra Township (Hwy 11 and 400) and the Barrie Landfill, MOE to investigate off-site disposal area



Drawn by	Date	City of Barrie, showing location of former gas works.
Checked by	Date	
Revisions	Date	
INTERA Technologies		



Drawn by	Date
Checked by	Date
Revisions	Date

1907 Plan of Barrie Gas Works, (Source: Fire insurance plan, Public Archives Canada, NMC-9292, 18/29)

INTERA Technologies

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Belleville Street Address 110-118 Church Street bounded by

Church/St. Paul/Pinnacle/Dundas

MOE Region Southeastern

MOE District Belleville NTS Map Sheet 31 C/3

Historical Maps Available 1878 - Fire Insurance Plan (Archives of Ontario, Sheet 1-8); 1888 - Fire Insurance Plan (A of O) Sheet 12; 1904 - Revision of 1888 Fire Insurance Plan (A of O) Sheet 12; 1942 - Fire Insurance Plan (Regional Collection, University of Western Ontario) Sheet 7

2. Site Identification:

Name Belleville Gas Works

Type of Facility Coal Carbonization

Operator(s) and Period(s) of Operation Belleville Gas Co. 1854-1930,

Ontario Shore Gas Co. 1930-1935, Belleville Public Utilities Commission 1937-1947

3. Site Characteristics:

Size (when operated) Medium, 0.7 hectares

Present Land Use Vacant, Industrial

Planned Land Use Vacant lot for sale - development plans?

Present Occupant(s) Hawkins Snack Foods Ltd. and Vacant lot (for sale by
Royal-LePage)

Present Land Use Adjoining Properties N,E - commercial, W-Industrial,
Residential, S-Residential

Underground Utilities Sanitary sewer along Pinnacle Street,
Storm sewer along St. Paul Street

Soil Conditions Thin overburden (less than 2 m), limestone bedrock

Site Access Uncontrolled access

4. **Evidence of Buried Wastes:**

Operating Period 1854 to 1947 (93 years)

Excavation History Sanitary sewer along Pinnacle Street, Storm sewer along Front and St. Paul Streets

Visible Wastes Coal tar wastes encountered in Pinnacle Street excavation and again in Front Street/St. Paul Street excavation

Odour Faint surface odour detected during site visit

Water Pollution Contaminated water in excavation discharged to Moira River creating an oil slick in 1981

5. **Resource Characteristics:**

Surface Water Moira River and Bay of Quinte

Proximity 160 m west of site

Use Recreational, City Water Supply on Bay of Quinte

Groundwater, Proximity 2.4 to 3.4 m below surface

Use None

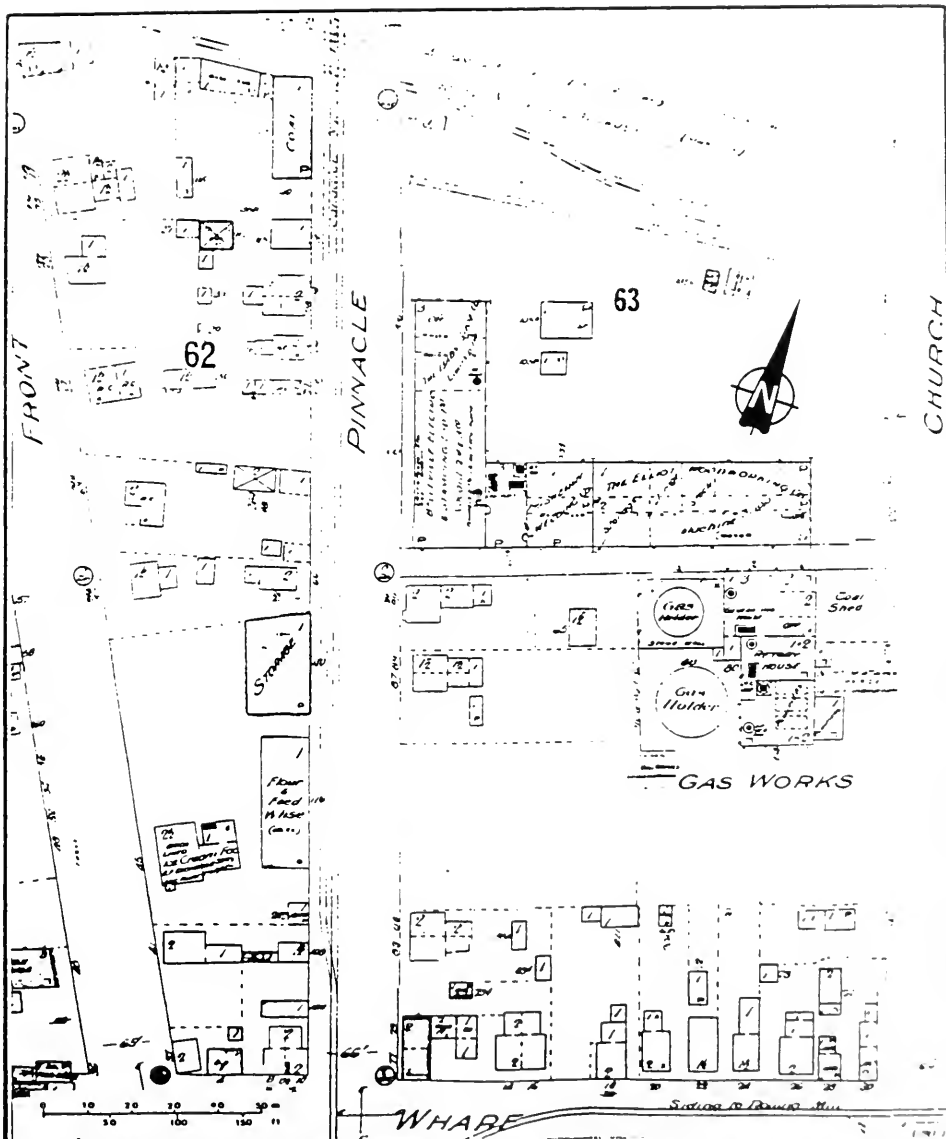
Proximity of Existing Wells Unknown

Site Investigations MOE 1981 soil and liquid sampling - PAHs detected:

MOE 1983 river sediment sampling - PAHs detected

6. **Comments/Remarks:** Clay seal installed in trench excavation. Contamination appears to be between gas plant and Moira River. Area is thought to be future development area.

7. **Off-Site Disposal Areas:** Dumping of gas plant waste may have occurred at south end of Church Street at waterfront. Some excavated material and contaminated river sediments may have been disposed on the Macfarland Construction property Hwy 401 at 14.



Drawn by	Date
Checked by	Date
Revisions	Date

1915 Plan of Belleville Gas Works,
(Source: Fire insurance plan, Archives
of Ontario, sheet 12)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Brampton Street Address Northeast corner Nelson and
George Streets
MOE Region Central
MOE District Toronto NTS Map Sheet 30 M/12
Historical Maps Available 1917 - fire insurance plan (Regional Collection, Univ.
of Western Ontario), Sheet 2 and general plan

2. Site Identification:

Name Brampton Gas Works
Type of Facility Assumed coal gasification
Operator(s) and Period(s) of Operation Brampton Gas Co. (1888-1902); the
Equitable Gas Co. (1903-1917)

3. Site Characteristics:

Size (when operated) Small 0.1 hectares
Present Land Use Commercial building (2 storey with basement)
Planned Land Use As is
Present Occupant(s) Private Owner (commercial building)

Present Land Use Adjoining Properties N - City of Brampton parking lot, E - auto
sales, S & W - commercial bldgs, federal government office building

Underground Utilities Storm and sanitary sewers, phone lines, water mains and
gas lines along Nelson St. & George St.

Soil Conditions 1.5 m fill over clay

Site Access Uncontrolled

4. Evidence of Buried Wastes:

Operating Period 1888-1917? Less than 30 years

Excavation History Coal yard north of site excavated and 1.5 m of fill removed
(late 1986); commercial building 3 m deep (1957) both with no wastes reported

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Etobicoke Creek; Fletcher's Creek

Proximity 300 m east; 300 m west

Use Recreational

Groundwater, Proximity None reported

Use None

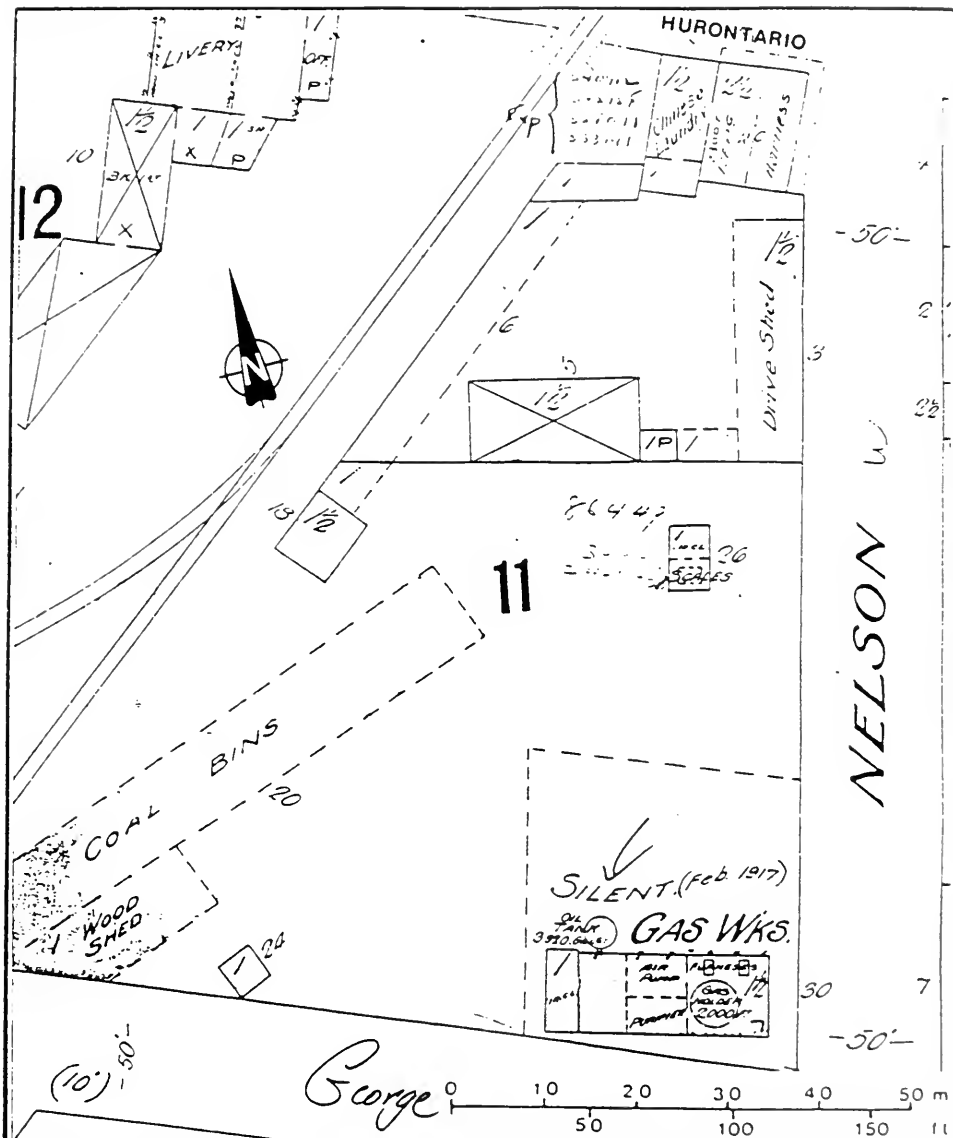
Proximity of Existing Wells No wells in area

Site Investigations None known

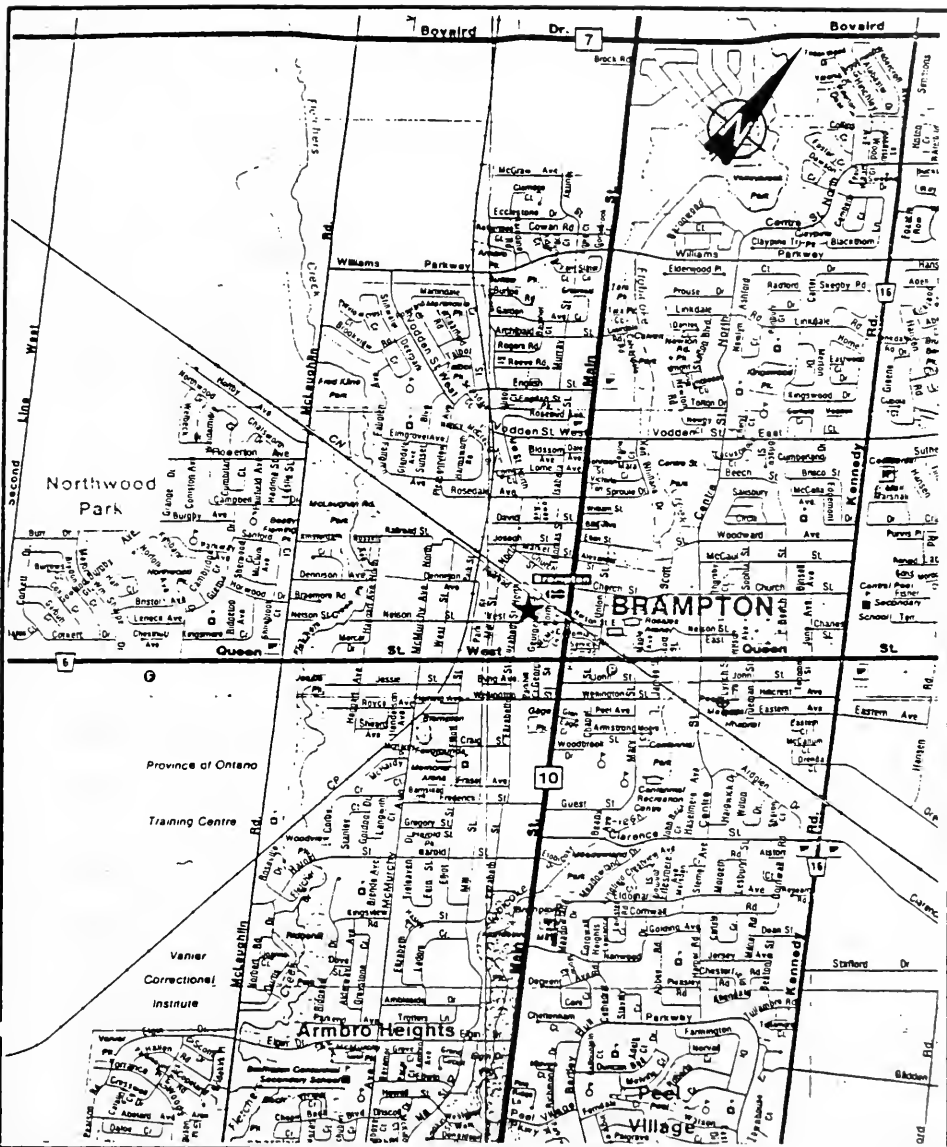
6. Comments/Remarks: Former coal yards north of plant site, now City of Brampton
parking lot

7. Off-Site Disposal Areas:

No known sites used during plant operation. Soil removed during 1986 excavation
of coal yard used as fill in Nursery on Creditview Rd and on property on Highway
10 south of #17 sideroad



Drawn by	Date	1917 Plan of Brampton Gas Works, (Source: Fire insurance plan, Regional Collection, University of Western Ontario, sheet 2)
Checked by	Date	
Revisions	Date	
INTERA Technologies		



Drawn by	Date
Checked by	Date
Revisions	Date

City of Brampton, showing location of former gas works.

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Brantford Street Address East Avenue bounded by Alfred,
Newport, East, Colborne Streets
MOE Region West Central
MOE District Hamilton NTS Map Sheet 40 P/1

Historical Maps Available 1875 - Bird's eyeview (Public Archives Canada, NMC 3726)
1913 - Revision of 1893 Fire Insurance Plan (Regional Collection, University of
Western Ontario), Sheet 7; 1950 - Revision of 1919 Fire Insurance Plan (PAC,
NMC 9331 5/53 site, 1A/53 general)

2. Site Identification:

Name Brantford Gas Works
Type of Facility Coal gasification
Operator(s) and Period(s) of Operation Brantford Gas Co. 1854 to 1911

3. Site Characteristics:

Size (when operated) Medium, approx. 0.5 - 1.0 ha (includes property north and
south of East Avenue)
Present Land Use Maintenance warehouse and parking lots, commercial

Planned Land Use As is
Present Occupant(s) Union Gas Co.

Present Land Use Adjoining Properties N-commercial & residential, W-commercial,
S-parkland, E-residential

Underground Utilities Storm sewer and Sanitary sewer along East Avenue
Soil Conditions Unknown, fill assumed
Site Access Controlled access for south of East Avenue; Uncontrolled access
for north of East Avenue

4. **Evidence of Buried Wastes:**

Operating Period Approx. 1860-1911 (approx. 51 years but not continuously)

Excavation History 450 mm sanitary sewer on East Avenue

Visible Wastes None reported

Odour Odours (petroleum-like) in water works creek near East Avenue (source uncertain)

Water Pollution Oily sheen on water works creek (source uncertain)

5. **Resource Characteristics:**

Surface Water Water Works Creek and Grand River

Proximity Creek adjacent to site, River less than 1 km

Use Recreational/Industrial

Groundwater, Proximity Unknown

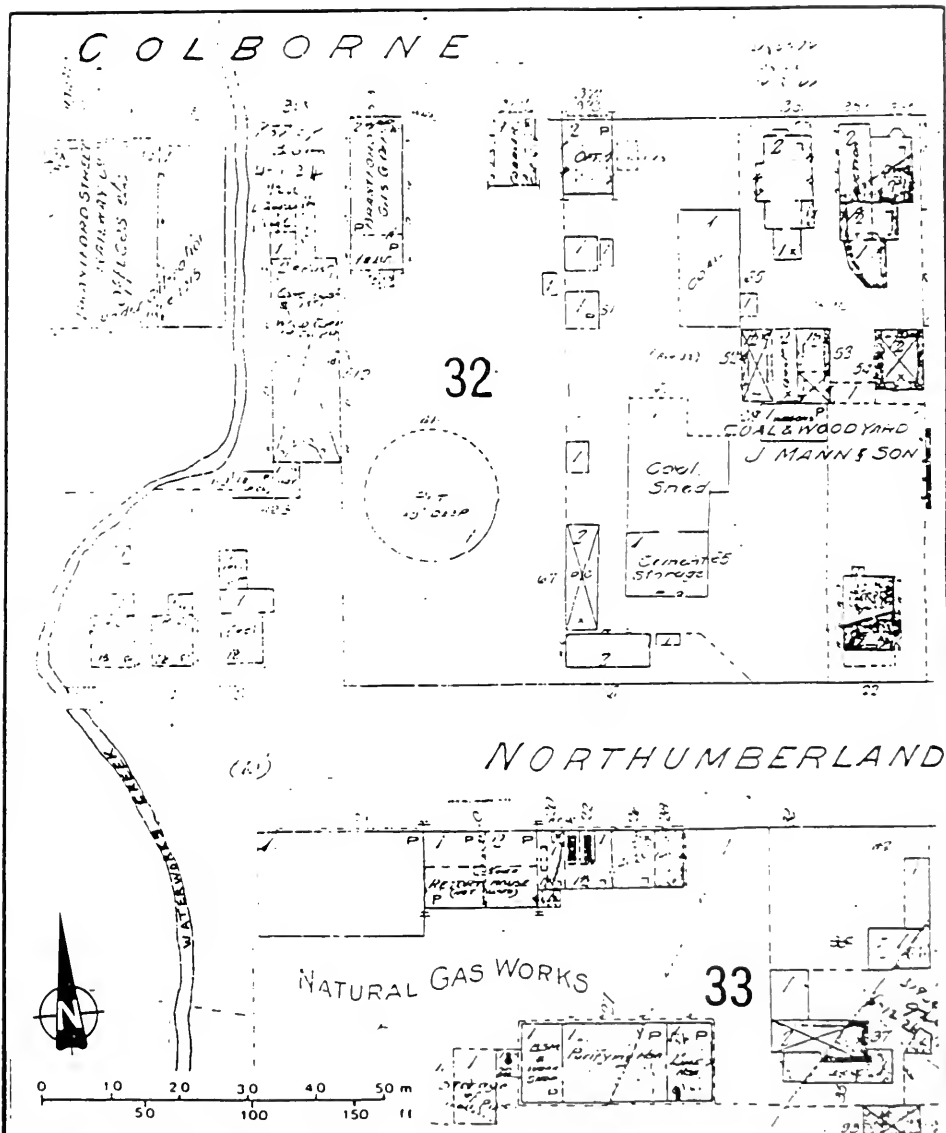
Use Groundwater not used

Proximity of Existing Wells Unknown

Site Investigations None known

6. **Comments/Remarks:** Petroleum odours, sheen on creek may be associated with Gas Plant; Area behind gas works previously a canal basin and was reclaimed in the early 1950's

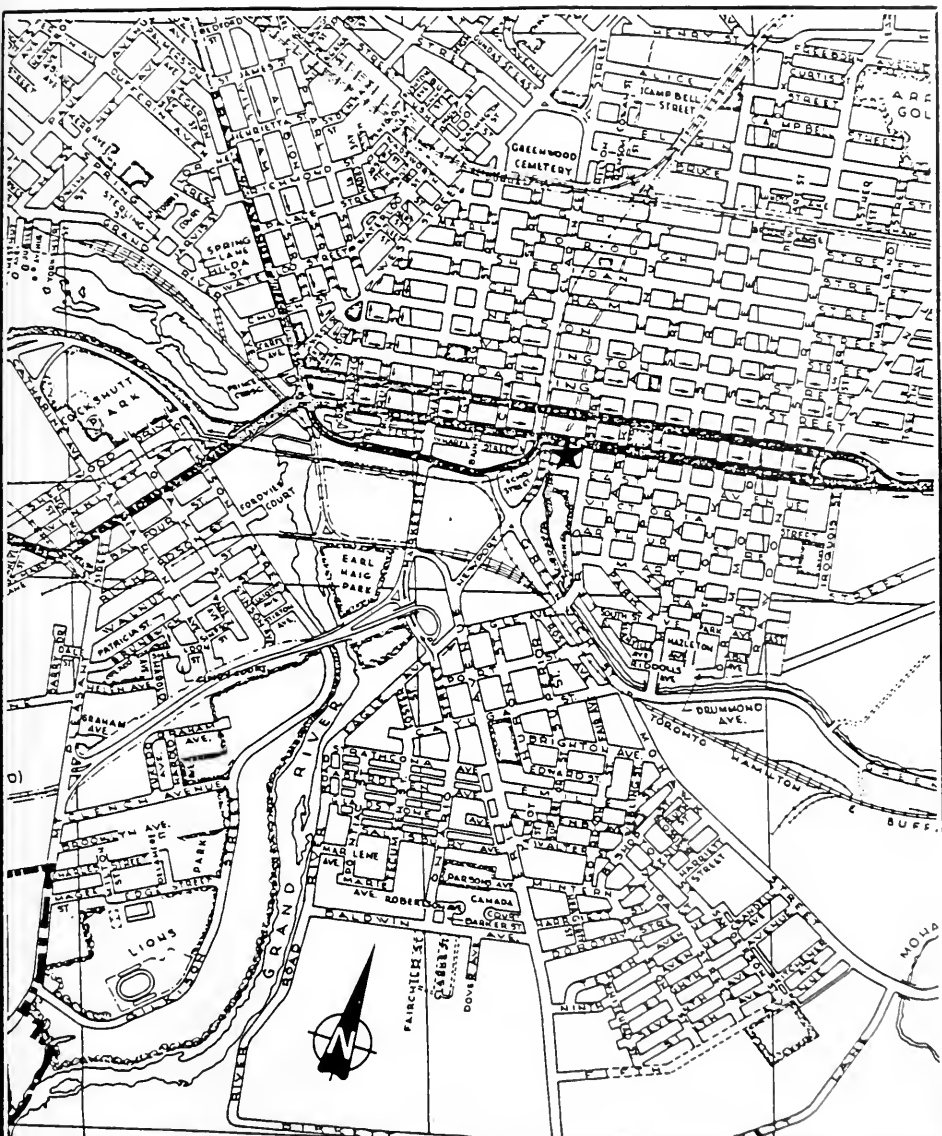
7. **Off-Site Disposal Areas:** None reported



Drawn by	Date
Checked by	Date
Revisions	Date

1916 Plan of Brantford Gas Works, (Source: Fire insurance plan, Regional Collection, University of Western Ontario, sheet 5)

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Drawn by	Date
Checked by	Date
Revisions	Date

City of Brantford, showing location of former gas works.

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Brockville Street Address 40 St. Paul Street bounded by
St. Paul/King St. W/Butlers Creek
MOE Region Southeastern
MOE District Kingston NTS Map Sheet 31 B/12

Historical Maps Available 1875 - Bird's Eye View, Blow Up (Public Archives Canada
NMC 11 (5031); 1917 - Revision of 1911 Fire Insurance Plan (Regional Collection,
University of Western Ontario), Sheet 7; 1931 - Revisions of 1912 Fire Insurance
Plan (PAC, NMC 9327, 7/17); 1946 - Revisions of 1931 Fire Insurance Plan (PAC,
NMC 9328

2. Site Identification:

Name Brockville Gas Works
Type of Facility Coal carbonization then water gas
Operator(s) and Period(s) of Operation Brockville Gas Works 1853-1921
Brockville Public Utilities Commission 1921-1957

3. Site Characteristics:

Size (when operated) Small, 0.5 ha
Present Land Use Commercial
Planned Land Use As is
Present Occupant(s) City owned parking lot for Arts Centre and IGA

Present Land Use Adjoining Properties N-commerical W-commerical S-residential
E-residential
Underground Utilities Sanitary sewer and water mains in parking lot, small
diameter storm sewers to creek
Soil Conditions Unknown, fill assumed
Site Access Uncontrolled access

4. Evidence of Buried Wastes:

Operating Period 1853 to 1957 (104 years)

Excavation History Sanitary sewers and water mains through parking lot and stor
drains to creek

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Butler Creek adjacent to site (flows to St. Lawrence River)

Proximity Adjacent to site

Use Recreational

Groundwater, Proximity Unknown

Use Unknown (unlikely to be used)

Proximity of Existing Wells None reported in impact area

Site Investigations Shallow excavations during parking lot construction

6. Comments/Remarks: Excavation through site but no wastes reported; 5 m gradient
creek

7. Off-Site Disposal Areas: Possibly Old Chemical Road Landfill



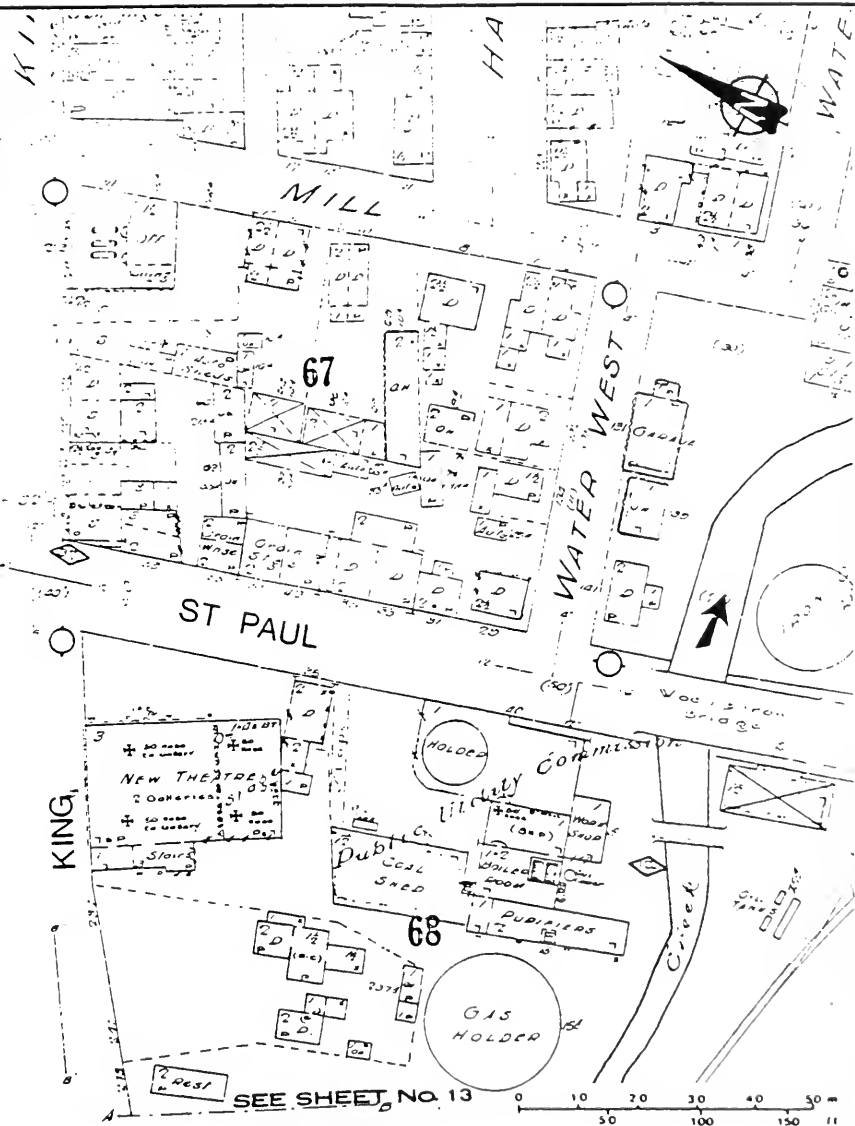
ST. LAWRENCE RIVER

Drawn by	Date
Checked by	Date
Revisions	Date

City of Brockville, showing location of former gas works.

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SEE SHEET NO. 11



SEE SHEET NO. 13

Drawn by	Date
Checked by	Date
Revisions	Date

1931 Plan of Brockville Gas Works,
(Source: Fire insurance plan, Public
Archives Canada, NMC-9327, 7/17)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Cambridge (Galt) Street Address 140 North Water Street bounded
by Grand River and opposite Simcoe Street
MOE Region West Central
MOE District Cambridge NTS Map Sheet 40 P/8
Historical Maps Available 1913 - Revisions of 1910 Fire Insurance Plan (Regional
Collection, University of Western Ontario) Sheet 24; 1919 - Revisions of 1910
Fire Insurance Map (Ontario Archives) Sheet 24

2. Site Identification:

Name Galt Gas Works
Type of Facility Retort Gas
Operator(s) and Period(s) of Operation Galt Gas Light Co. 1887-1911

3. Site Characteristics:

Size (when operated) Small, 0.35 ha
Present Land Use Vacant lot

Planned Land Use High rise residential condominiums (Spring 1987)
Present Occupant(s) Vacant (C.N.A. Holdings Ltd.)
Present Land Use Adjoining Properties N,E,S - Commerical W-Recreational

Underground Utilities Water main and Storm sewer along Water Street North
Sanitary sewer through former plant site
Soil Conditions Thin soil (less than 1.0 m) overlying bedrock

Site Access Fenced but uncontrolled access

4. **Evidence of Buried Wastes:**

Operating Period 1887 to 1911 (24 years)

Excavation History Gas Plant demolished in 1920's (?) and textile plant extens.
built, 1985 textile plant demolished

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Grand River

Proximity Adjacent, west of site

Use Recreational, industrial water supply

Groundwater, Proximity Water supply wells approx. 30 m below river level

Use Water supply

Proximity of Existing Wells Middle St. Well Field (0.8 km downstream)

Site Investigations None reported

6. **Comments/Remarks:** Condo planned for Spring 1987. Waste may have been removed
during demoli tion. Soil is thin on-site

7. **Off-Site Disposal Areas:** None reported



Drawn by	Date
Checked by	Date
Revisions	Date

Town of Galt, showing location of former gas works.

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. **Site Location:**

City Chatham Street Address 307 King Street West bounded by
Second/King West/ Third/Thames River
MOE Region Southwestern
MOE District Windsor NTS Map Sheet 40 J/6

Historical Maps Available 1875 - Bird's eye view (Public Archives Canada, NMC 22302); 1895 - Bird's eye view (Public Archives Canada, NMC 3764); 1913 - Revision of 1903 Fire Insurance Plan (Regional Collection, University of Western Ontario), key map only; 1929 - update of 1913 Fire Insurance Plan (Regional Collection, University of Western Ontario), Sheet 2; 1954 - Fire Insurance Plan (Public Archives Canada), Sheet 2

2. **Site Identification:**

Name Chatham Gas Works
Type of Facility Retort Gas
Operator(s) and Period(s) of Operation Chatham Gas Co. Ltd. 1873-1929
Final date uncertain

3. **Site Characteristics:**

Size (when operated) Medium, 1.1 ha
Present Land Use Chatham Civic Centre (Institutional)

Planned Land Use As is
Present Occupant(s) The Corporation of the City of Chatham
Present Land Use Adjoining Properties N - Thames River, W - YMCA, S- Parking
lot and residential, E - Residential
Underground Utilities Storm and Sanitary sewers along King St.
Sanitary pumping station on Second St.
Soil Conditions Fill 0-3.0 m, Alluvium 3.0-12.0 m, Till 12-20 m, Bedrock at 20 m
BGS
Site Access Uncontrolled public use area

4. **Evidence of Buried Wastes:**

Operating Period 1873 to 1929 (56 years)

Excavation History Entire area excavated during construction of the Chatham Civic Centre in 1975

Visible Wastes Oily water and asphaltic wastes encountered in gas holding tank (18 m diameter) and tar well (4.3 m diameter) during building excavation

Odour None reported or observed

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Thames River

Proximity Adjacent to site

Use Recreational

Groundwater, Proximity Approx. 5 m BGS

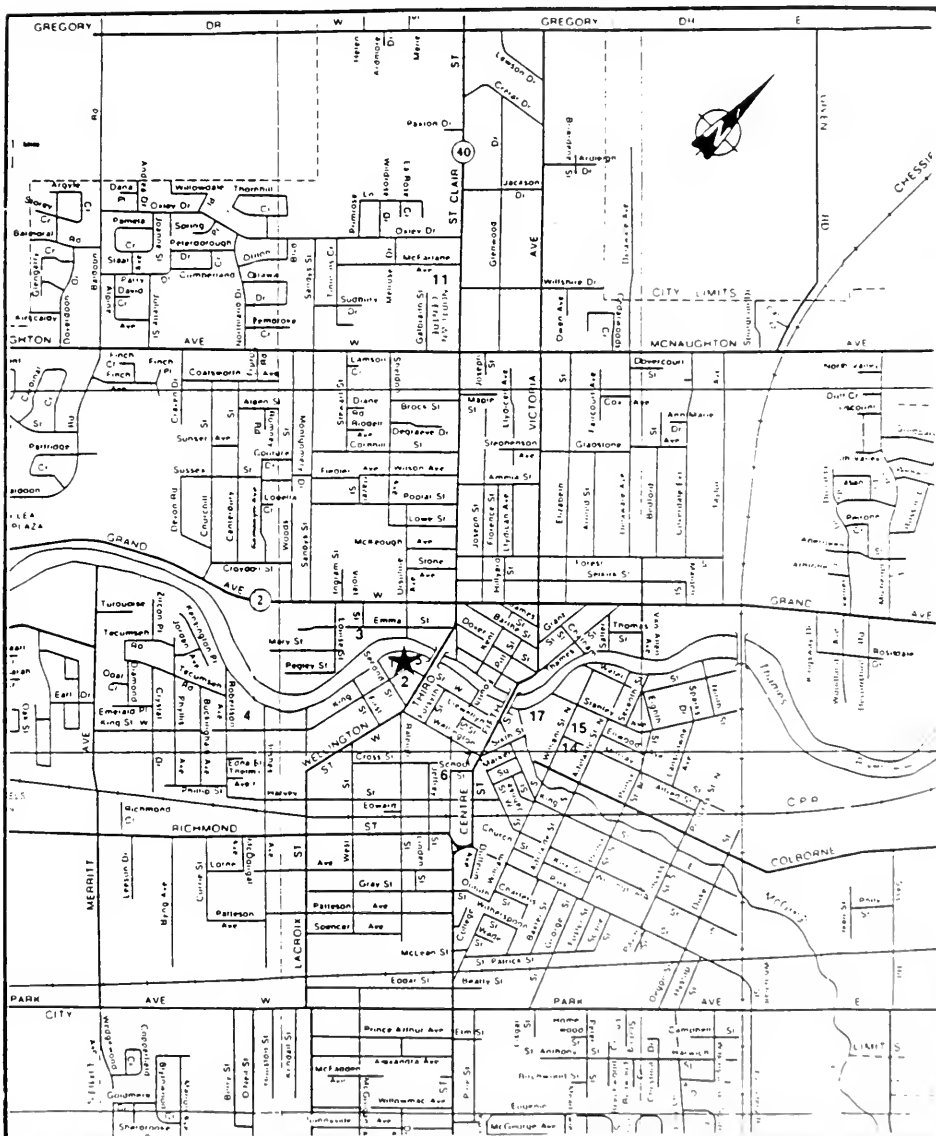
Use Not used

Proximity of Existing Wells Unknown

Site Investigations Five geotechnical boreholes drilled prior to building construction

6. **Comments/Remarks:** Volume of material excavated unknown. It is also not known all waste material was removed

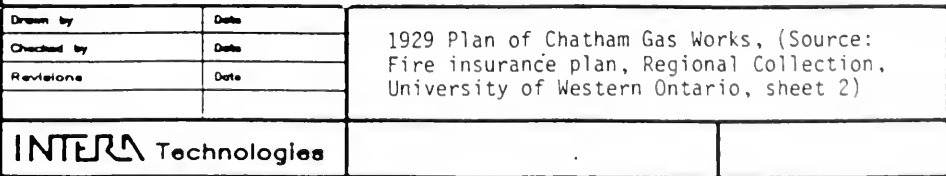
7. **Off-Site Disposal Areas:** Excavated waste material removed by building contractor (Ellis-Don) to unknown location



Drawn by	Date
Checked by	Date
Revisions	Date

City of Chatham, showing location of former gas works.

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Cobourg Street Address Between Queen and Charles Streets
west of McGill Street, east of Division Street
MOE Region Central
MOE District Peterborough NTS Map Sheet 30 M/16

Historical Maps Available 1874 - Bird's eye view (Public Archives Canada, NMC 8877); 1911 - Revision of 1902 Fire Insurance Plan (Regional Collection, University of Western Ontario), Sheet 4 and key; 1946 - Revision of 1919 Fire Insurance Plan (Public Archives Canada, NMC 9398 3/16)

2. Site Identification:

Name Cobourg Gas Works
Type of Facility Coal gasification
Operator(s) and Period(s) of Operation Cobourg Gas Works (1857-1878), Cobourg Gas
Light and Water (1878-1911), Cobourg Utilities Corp. (1911-1916), Hydro Electric
Power Commission of Ontario (1916-1937)

3. Site Characteristics:

Size (when operated) Small, 0.3 ha
Present Land Use Institutional, Commercial
Planned Land Use As is
Present Occupant(s) 1) Cobourg Post Office, c/o Canada Post Corporation, Public
Works Canada; 2) Northumberland Professional Building Ltd.
Present Land Use Adjoining Properties N-parking lot, garage, cleaners, E-parkland
S-Swimming pool, residences, W-professional building, vacant
Underground Utilities Storm, sanitary sewers and watermains along Queen Street and
Charles Street
Soil Conditions Fill 0-1 m, silt and clay 1-2.5 m, till 2.5-5 m, limestone
Site Access Post office - controlled; professional building, parking lot -
uncontrolled

4. **Evidence of Buried Wastes:**

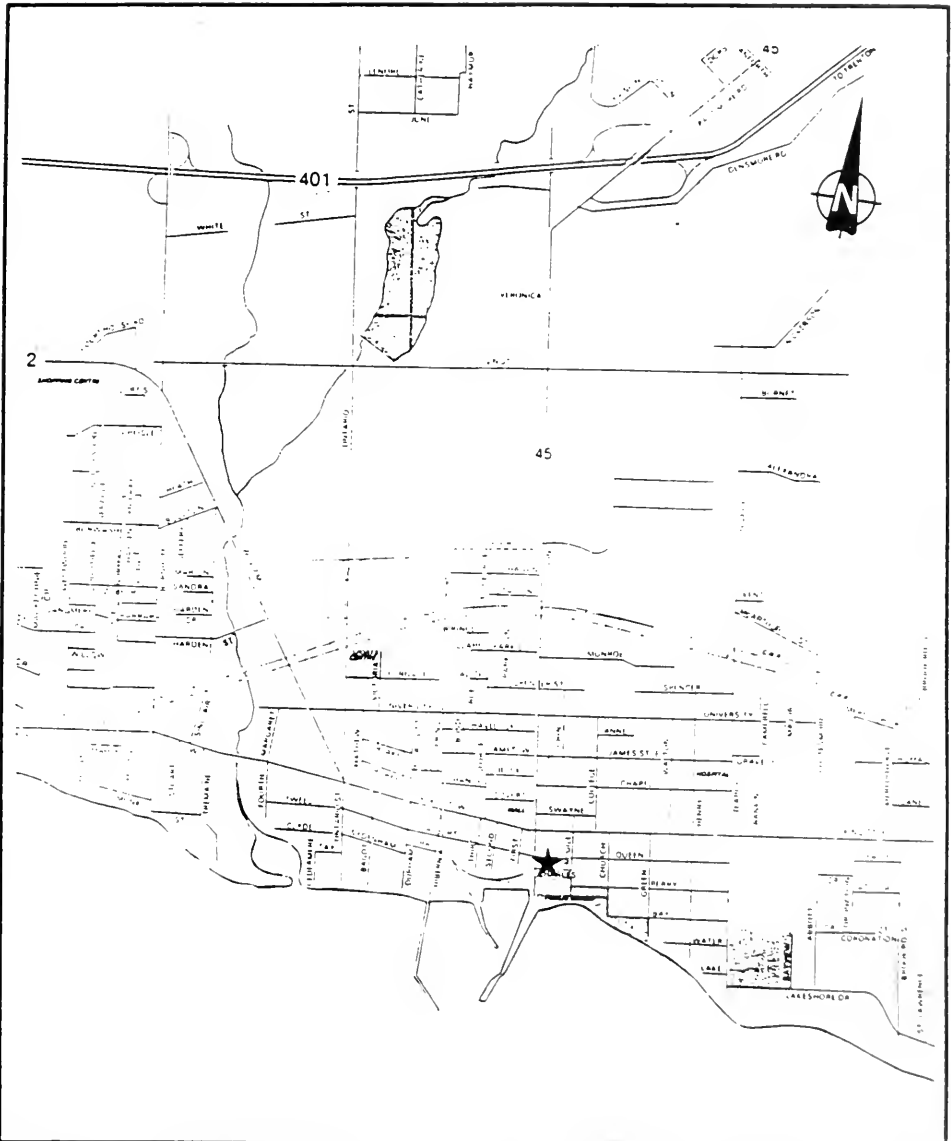
Operating Period 1857 to 1937 (80 years)
Excavation History Post Office construction (1952, 1970); Professional building construction, sewer installation (mid 1960's, late 1970's), Centennial Pool construction (1968)
Visible Wastes None reported or observed
Odour None reported or observed
Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Lake Ontario
Proximity 150 m southeast
Use Recreational, water supply 800 m east of site
Groundwater, Proximity High water table
Use None reported
Proximity of Existing Wells No wells within impacted area
Site Investigations 1970 boreholes for Post Office extension, 1966, 1967 boreholes for Centennial Pool, 1978 boreholes for Charles Street joint sewage works project

6. **Comments/Remarks:** Gas holding tank and base of gas purifying structures likely beneath Post Office parking lot

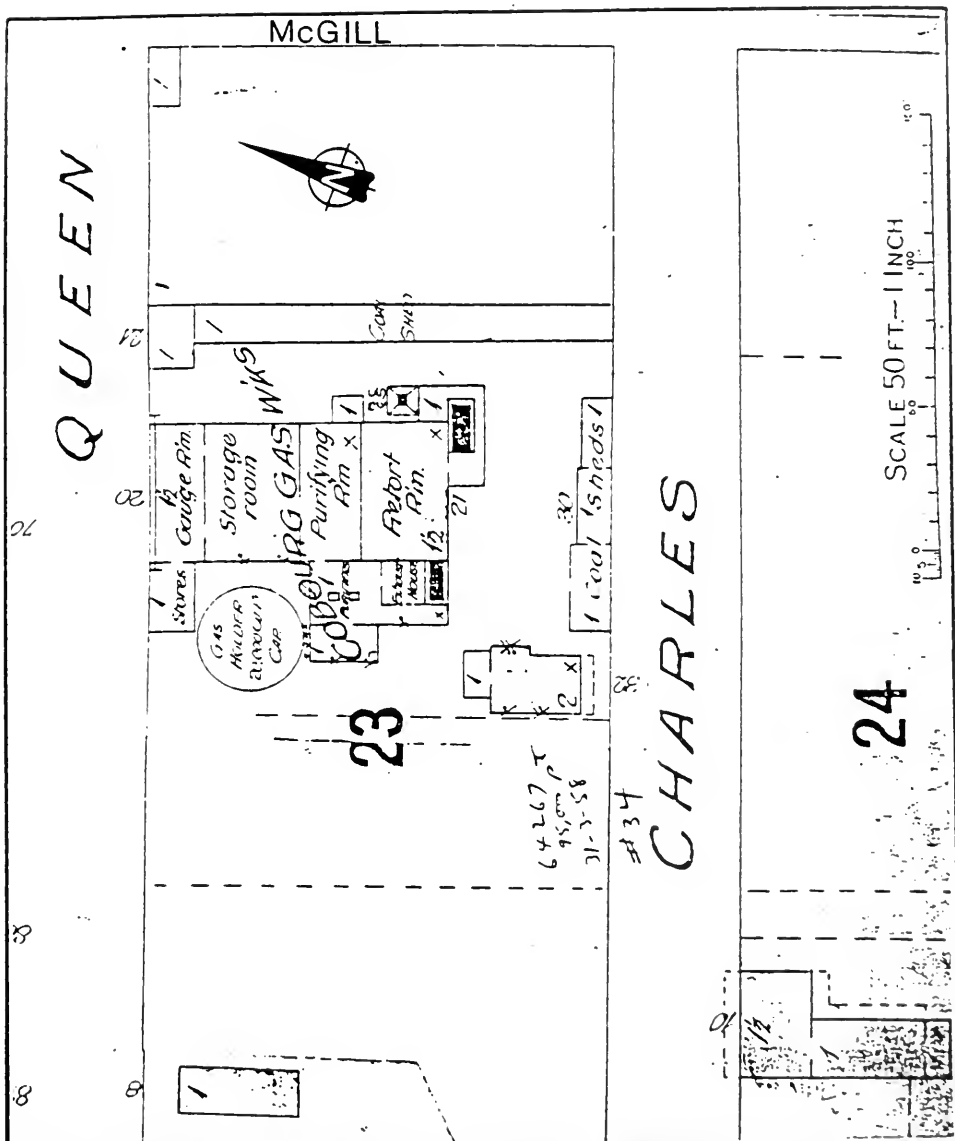
7. **Off-Site Disposal Areas:** Ash, cinder, fill and wood chips noted in boreholes on southside of Charles Street - likely disposal area



Drawn by	Date
Checked by	Date
Revisions	Date

City of Cobourg, showing location of former gas works.

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Revisions	Date

1911 Plan of Cobourg Gas Works, (Source: Fire insurance plan, Regional Collection, University of Western Ontario, sheet 3)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. **Site Location:**

City Cornwall Street Address Water Street bounded by Amelia/
Adolphus/Water Streets
MOE Region Southeastern
MOE District Cornwall NTS Map Sheet 31 G/2
Historical Maps Available 1916 - Revision of 1893 Fire Insurance Plan (Public
Archives Canada, NMC 9381 6/12, Key 1/12); 1947 - Fire Insurance Plan (PAC, NMC
9382) Sheet 6

2. **Site Identification:**

Name Cornwall Gas Works
Type of Facility Coal carbonization then water gas
Operator(s) and Period(s) of Operation Cornwall Gas and Light Co. 1882-1895
Stormont Electric Light and Power Co. 1895 to 1929

3. **Site Characteristics:**

Size (when operated) Small, 0.4 ha
Present Land Use Residential (directly on site) Parking lot

Planned Land Use As is
Present Occupant(s) Residential (Edgar Caza Holdings)

Present Land Use Adjoining Properties N-commercial, W-institutional, S-vacant
E-parking lot
Underground Utilities 760 mm diameter trunk sewer traverses site; sanitary sewers
and watermains along Amelia and Water streets
Soil Conditions Unknown, fill assumed
Site Access Uncontrolled access

4. **Evidence of Buried Wastes:**

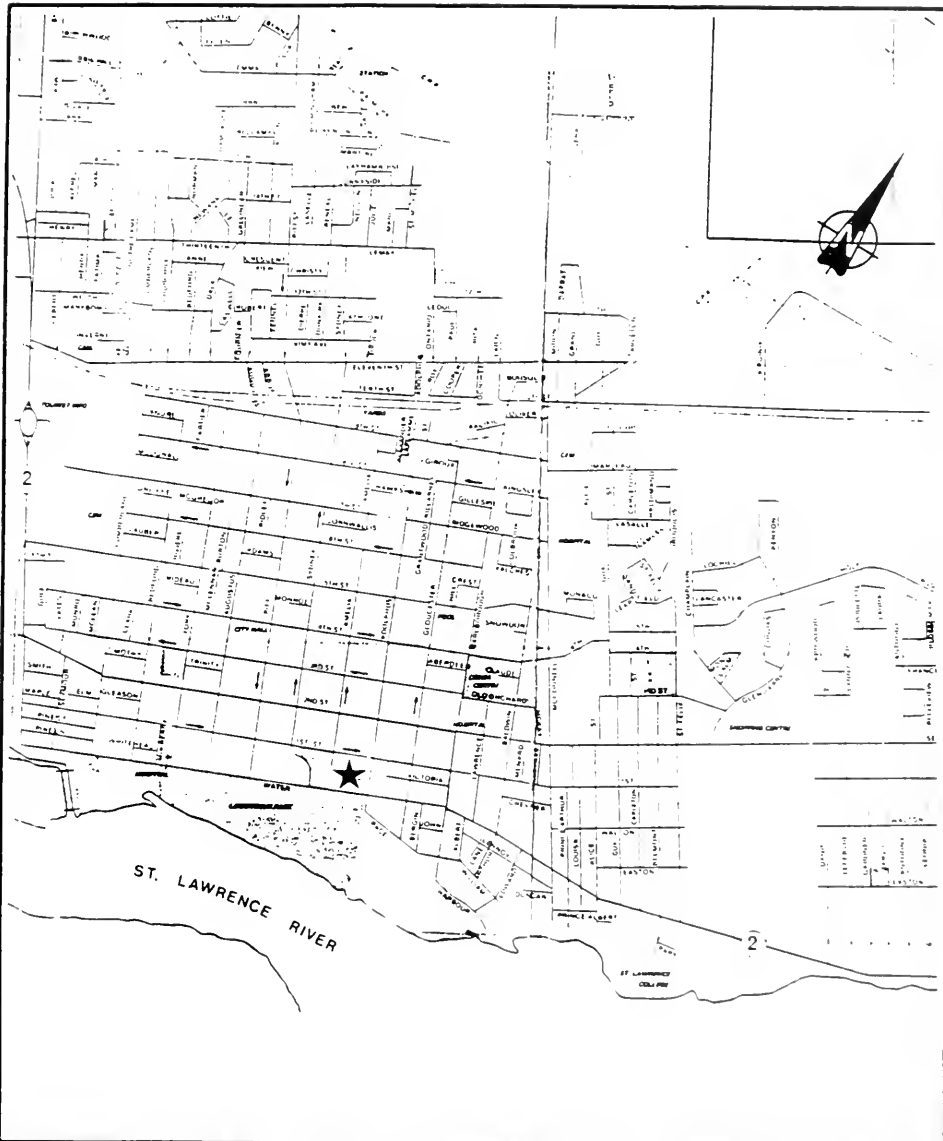
Operating Period 1882 to 1929 (47 years)
Excavation History numerous utilities along Amelia and Water Street, no reported problems; sewer traverses site - no problems reported
Visible Wastes None reported or observed
Odour None reported or observed
Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water St. Lawrence River
Proximity 0.4 km south
Use Recreational, water supply
Groundwater, Proximity Unknown
Use Unknown (unlikely water supply)
Proximity of Existing Wells None reported in impacted area
Site Investigations None

6. **Comments/Remarks:** Canal was historically south of site (see historical maps)

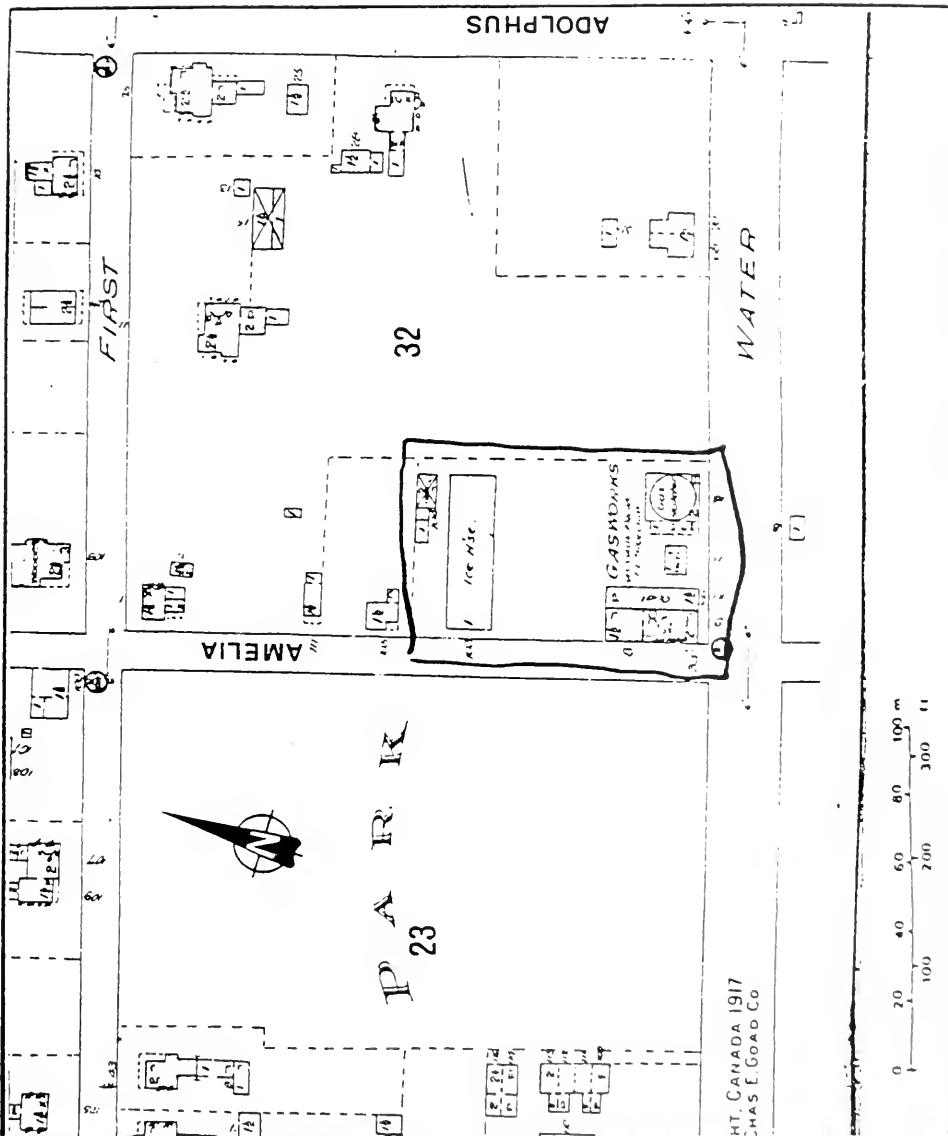
7. **Off-Site Disposal Areas:** Closest possible disposal area is three blocks west a end of Augusta Street



Drawn by	Date
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Revisions	Date

City of Cornwall, showing location of former gas works.

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Drawn by	Date
Checked by	Date
Revisions	Date

1916 Plan of Cornwall Gas Works, (Source:
Fire insurance plan, Public Archives
Canada, NMC-9381, 6/12)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Deseronto Street Address South side of Main Street between
First and Second Streets
MOE Region Southeastern
MOE District Kingston NTS Map Sheet 31 C/3
Historical Maps Available See attached

2. Site Identification:

Name Deseronto Gas Works
Type of Facility Coal gasification
Operator(s) and Period(s) of Operation Deseronto Gas Works (1886-1912?).
Deseronto Gas Company (1912?-1920)

3. Site Characteristics:

Size (when operated) Small, 0.3 hectares
Present Land Use Commercial manufacturing (furniture factory) and
residential
Planned Land Use Request to sever the property for a house
Present Occupant(s) Hawley Bros. Ltd.

Present Land Use Adjoining Properties N&E-main residential, S-Lake Ontario,
W-vacant
Underground Utilities Sanitary sewers and watermain along Main Street

Soil Conditions 2 ft. of soil overlying bedrock

Site Access Uncontrolled

- 1898 - Revision of 1893 fire insurance plan (Regional Collection, University of Western Ontario), Sheet 3 and key.
- 1922 - Fire insurance plan (Public Archives Canada, NMC 9401, 2/4)
- 1931 - Revision of 1922 fire insurance plan (Public Archives Canada, NMC 11913, 2/4)

4. Evidence of Buried Wastes:

Operating Period 1886 or slightly earlier to 1920, 34 years

Excavation History House (1951), excavation left open for one month to vent gas

Visible Wastes None reported or observed but likely present

Odour None reported or observed but likely present during excavation in 1951

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Bay of Quinte (Lake Ontario)

Proximity Borders south edge of site

Use Recreational, industrial, water supply

Groundwater, Proximity Level of Lake Ontario

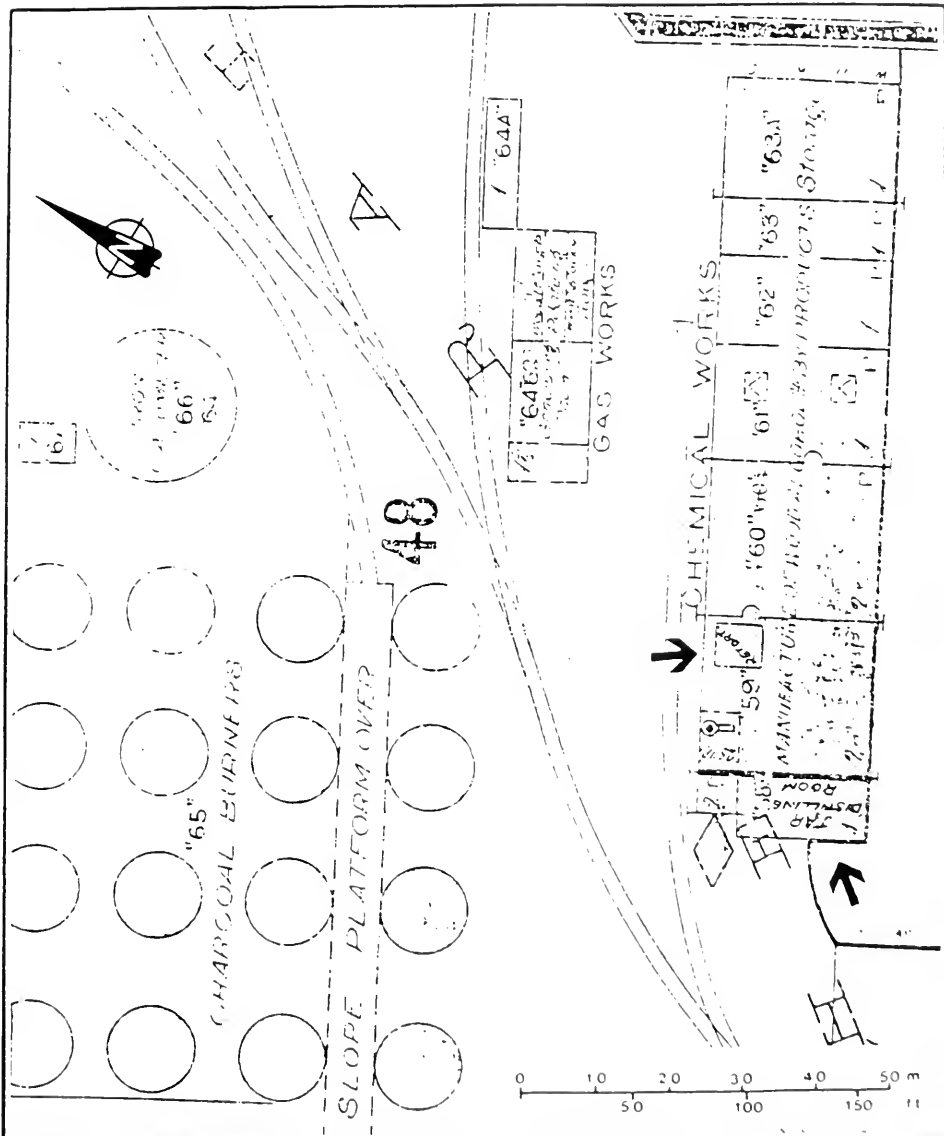
Use Not used

Proximity of Existing Wells None reported in area

Site Investigations None reported

6. Comments/Remarks: The water supply intake is not near the site. Chemical plant (wood alcohol and by-products) on adjacent property in 1898 (due south of gashouse)
The outline of the former gas holding tank is visible. Hole from tank filled in 1949.

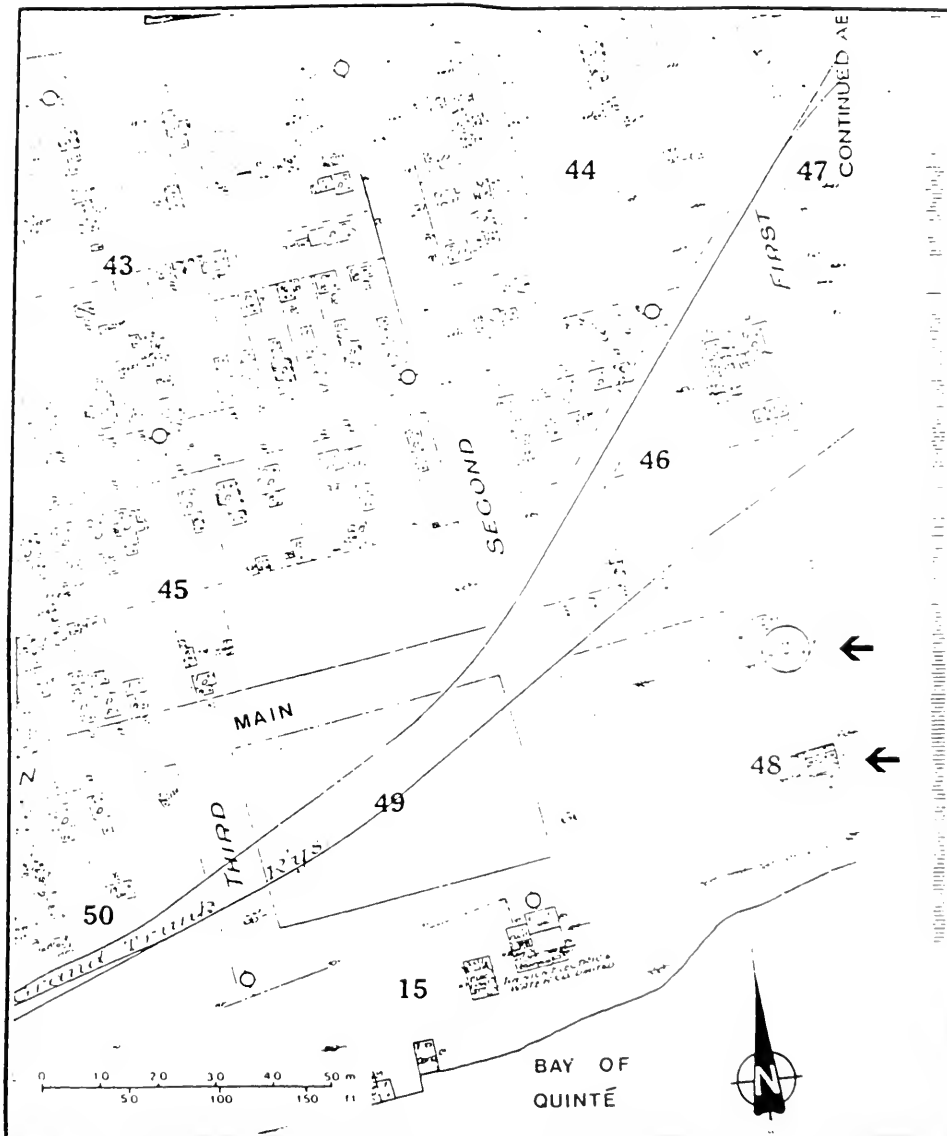
7. Off-Site Disposal Areas: No known disposal areas.



Drawn by	Date
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1898 Plan of Deseronto Gas Works and Chemical Works, (Source: Fire insurance plan, Regional Collection, University of Western Ontario.sh3)





Drawn by	Date
Checked by	Date
Revisions	Date

1922 Plan of Deseronto Gas Works, (Source: Fire insurance plan, Public Archives Canada, NMC-9401, 2/4)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. **Site Location:**

City Dundas Street Address 43 Cootes Drive, east side of
Thorpe St. and south of King St. E.
MOE Region West Central
MOE District Hamilton NTS Map Sheet 30 M/5
Historical Maps Available See attached sheet

2. **Site Identification:**

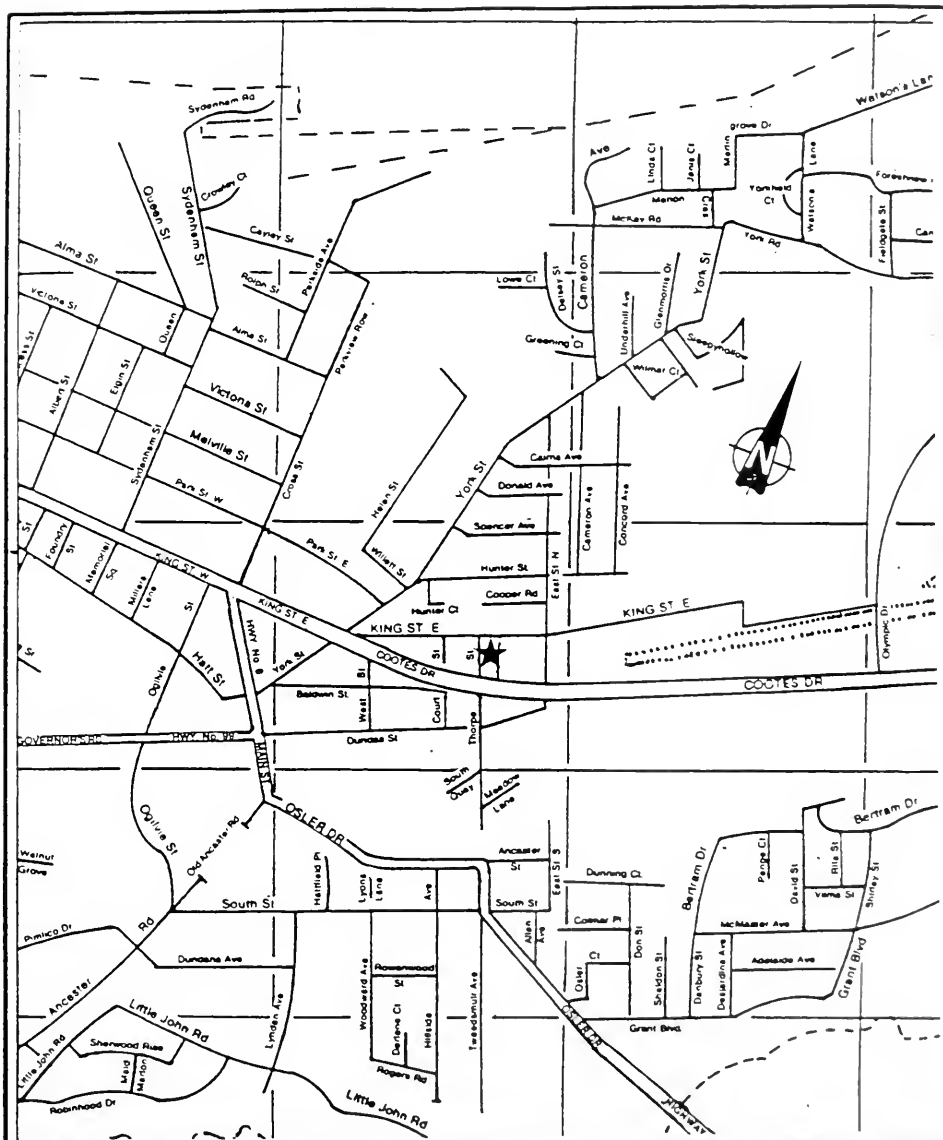
Name Dundas Gas Works
Type of Facility Coal gasification
Operator(s) and Period(s) of Operation Dundas Gas Light Co. (1863-1909)

3. **Site Characteristics:**

Size (when operated) Small, 0.2 hectares
Present Land Use Antenna manufacturing
Planned Land Use As is
Present Occupant(s) Union Gas Co., Colben Industries
Present Land Use Adjoining Properties N-residential, E-Alpha Commercial Properties
Ltd., S-Canadian Tire, W-residential
Underground Utilities Sanitary sewer and watermain along East St. and Cootes Dr.
storm sewer on Cootes Dr. and sanitary sewer on Thorpe St.
Soil Conditions Fill assumed
Site Access Uncontrolled access

Historical Maps Available

- 1875 - Page and Smith, Illustrated Historical Atlas of the County of Wentworth, Ontario, Toronto: Page and Smith, 1875, p. 43 (Public Archives Canada, G 1148)
- 1880 - Fire insurance plan (Public Archives Canada, NMC 51400), Sheet 5
- 1924 - Revisions of 1905 fire insurance plan (Regional Collection, University of Western Ontario), Sheets 1 and key.
- 1951 - Fire insurance plan (Public Archives of Canada, NMC 9407), Sheet 11/13



Drawn by	Date
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Revisions	Date

Town of Dundas, showing location of former gas works.

INTERA Technologies

4. **Evidence of Buried Wastes:**

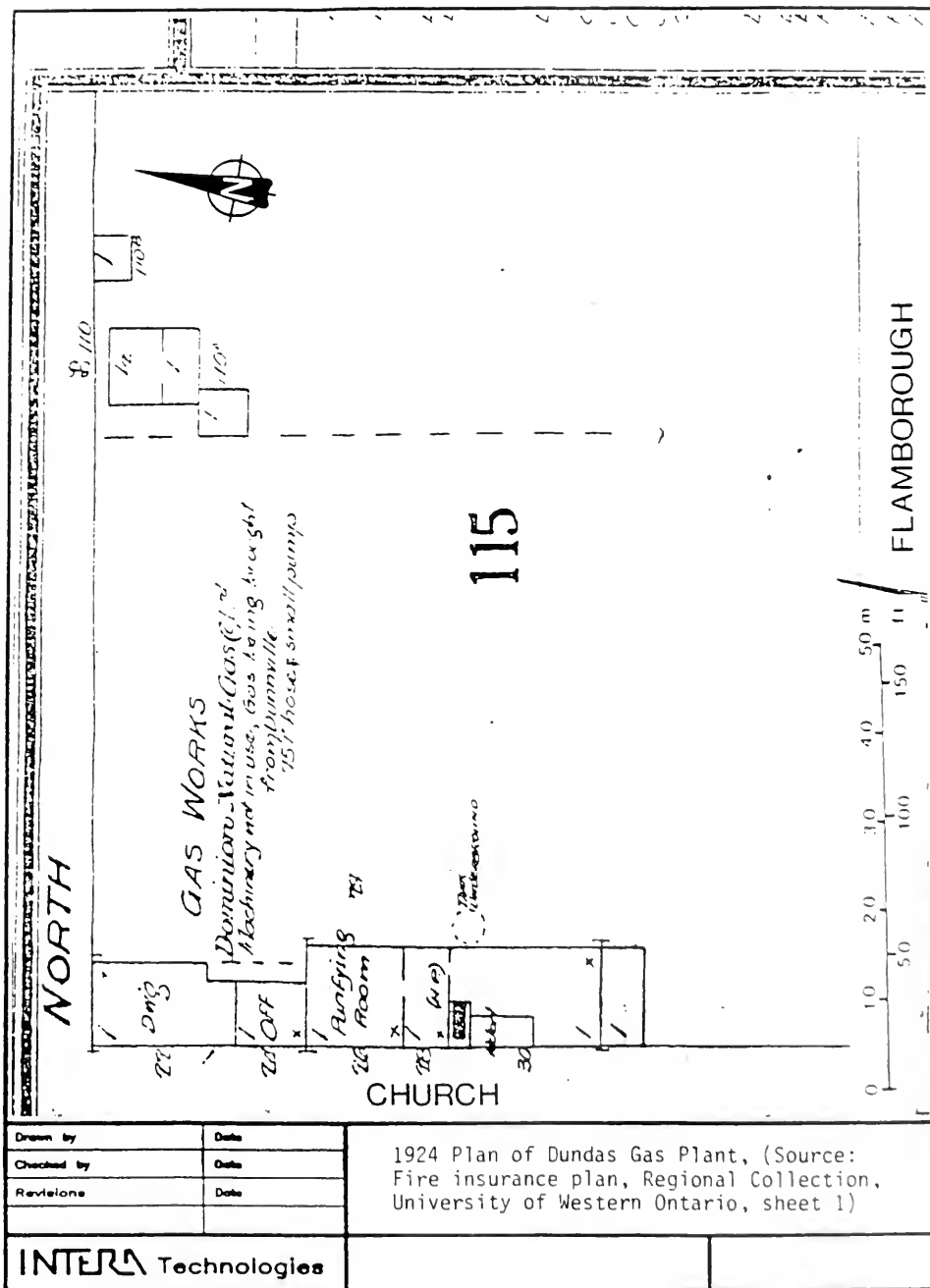
Operating Period 1863 - 1909 (46 years)
Excavation History 1.8 m x 1.8 m x 1.8 m brick enclosure, fill of cinders encountered on adjacent property, 45-49 Cootes Dr. (summer 1986). No excavation has occurred on-site. The original building and chimney still stand
Visible Wastes No tar reported or observed, some cinders and ash found
Odour None reported or observed
Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Spencer Creek
Proximity 100 m south
Use Recreational
Groundwater, Proximity Unknown
Use No groundwater use in area
Proximity of Existing Wells No wells in area
Site Investigations None reported

6. **Comments/Remarks:** Original building and chimney still stand. The original building does not have a basement

7. **Off-Site Disposal Areas:** Cinders and ashes excavated in 1987 were disposed on property on Sulphur Springs Road, Dundas



Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. **Site Location:**

City Guelph Street Address 118-124 Fountain St. N.W. corner
of Foundain and Wyndham Sts.
MOE Region West Central
MOE District Cambridge NTS Map Sheet 40 P/9
Historical Maps Available See attached sheet

2. **Site Identification:**

Name Guelph Gas Works
Type of Facility Coal gasification and carburetted water gas
Operator(s) and Period(s) of Operation Guelph Gas Co. (1871-1892), Guelph Gas
and Electric Light Co. (1893-1903), Board of Light and Heat Commissioners
(1903-1957)

3. **Site Characteristics:**

Size (when operated) Large, 1 hectare
Present Land Use Commerical office and parking

Planned Land Use Possible redevelopment
Present Occupant(s) Union Gas Co. office, City of Guelph parking
Present Land Use Adjoining Properties N&E-institutional, S-Commercial &
residential, W-residential
Underground Utilities Storm and santiary sewers along Wyndham St., Fountain St.,
Gordon St. and Surrey St. Gas line and watermain along Surrey St. and storm sew
coming from old plant site
Soil Conditions Sand fill mostly paved over
Site Access Union Gas - controlled access, City property - uncontrolled access

4. **Evidence of Buried Wastes:**

Operating Period 1871 - 1957 (86 years)

Excavation History Union Gas building (date unknown), fence posts were recently installed around the site

Visible Wastes During construction of fence, tar was discovered in the sand 1 m of surface

Odour None reported or observed

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Speed River

Proximity 200 m southeast

Use Recreational, water supply

Groundwater, Proximity Some local wells in area unlikely used

Use Water supply from municipal well

Proximity of Existing Wells Municipal well is 1 km away

Site Investigations Presently underway by a consultant

6. **Comments/Remarks:** Drinking water supply is surface water augmented by municipal wells

7. **Off-Site Disposal Areas:** No information on off-site disposal areas. See a sheet map for City of Guelph sanitary landfill sites

Historical Maps Available

- 1873 - Bird's eye view (Public Archives Canada NMC 3844), blow up
- 1911 - Revision of 1897 fire insurance plan (Public Archives Canada, NMC 9463 19/34)
- 1929 - Revision of 1922 fire insurance plan (Regional Collection, University of Western Ontario), Sheet 19
- 1960 - Fire insurance plan (Public Archives Canada, NMC 23296, 19/78)

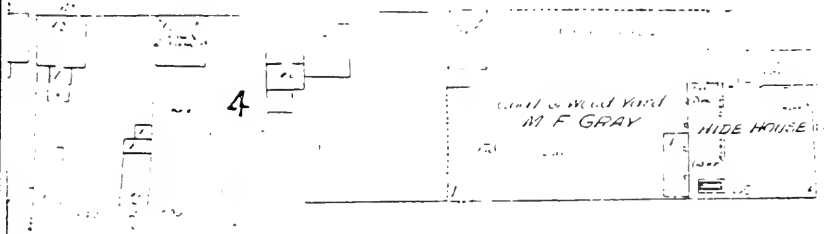


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Revisions	Date

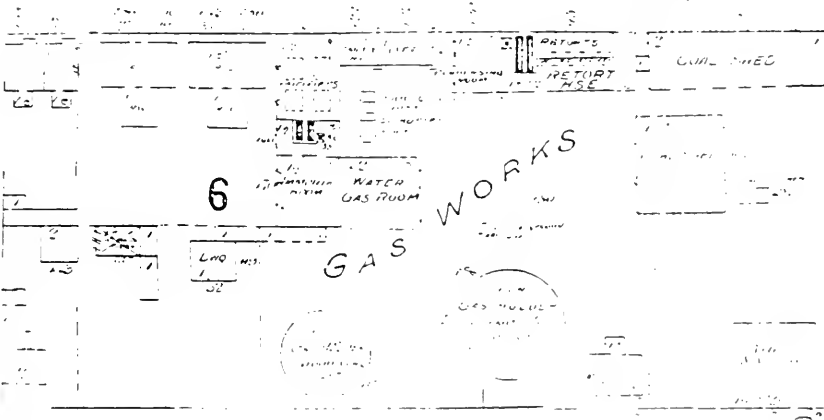
City of Guelph, showing location of
former gas works.

INTERA Technologies

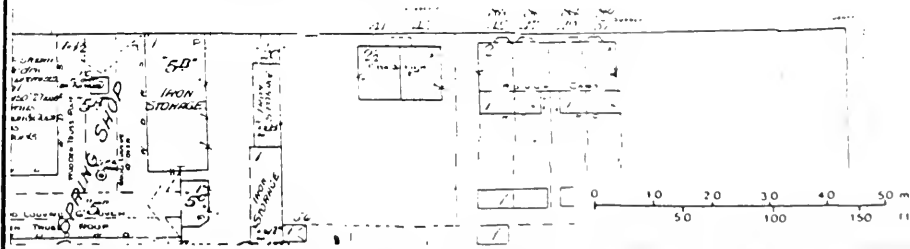
FARQUHAR



WATERLOO EAST



SURREY (EAST)



Drawn by	Date
Checked by	Date
Revisions	Date

1911 Plan of Guelph Gas Works, (Source: Public Archives Canada, NMC 23296, 19/78)

INTERA Technologies

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Hamilton Street Address Burlington-Industrial-Depew
Street area
MOE Region West Central
MOE District Hamilton NTS Map Sheet 30 M/5

Historical Maps Available 1941 fire insurance plan (Regional Collection, University of Western Ontario, Sheet 301); 1942 plan of property required at Hamilton Ontario, by Dominion of Canada, Depot of Munitions and Supply (Hamilton Wentworth Regional Land Registry Office)

2. Site Identification:

Name Hamilton By-Product Coke Ovens
Type of Facility Coke oven gasification
Operator(s) and Period(s) of Operation United Gas and Fuel Co. of Hamilton
(Hamilton By-Product Coke Ovens Ltd., 1924-1958)

3. Site Characteristics:

Size (when operated) Large 7-8 hectare
Present Land Use Heavy industrial
Planned Land Use As is
Present Occupant(s) Steel Company of Canada Ltd., Proctor and Gamble Inc.
Present Land Use Adjoining Properties Heavy industrial
Underground Utilities Storm, combined and sanitary sewers along Burlington
Street; storm sewer along Industrial
Soil Conditions Fill overlying clays and silts
Site Access Controlled

4. Evidence of Buried Wastes:

Operating Period 1924-1958, 34 years

Excavation History 0.6 m soil removed from Proctor and Gamble property as part of coke oven dismantling in 1947

Visible Wastes Yes, but none that can be solely attributed to operation of gas plant

Odour Yes, but none that can be solely attributed to operation of gas plant

Water Pollution Yes, but none that can be solely attributed to operation of gas plant

5. Resource Characteristics:

Surface Water Hamilton Harbour

Proximity Adjacent to plant site

Use Industrial

Groundwater, Proximity High water table

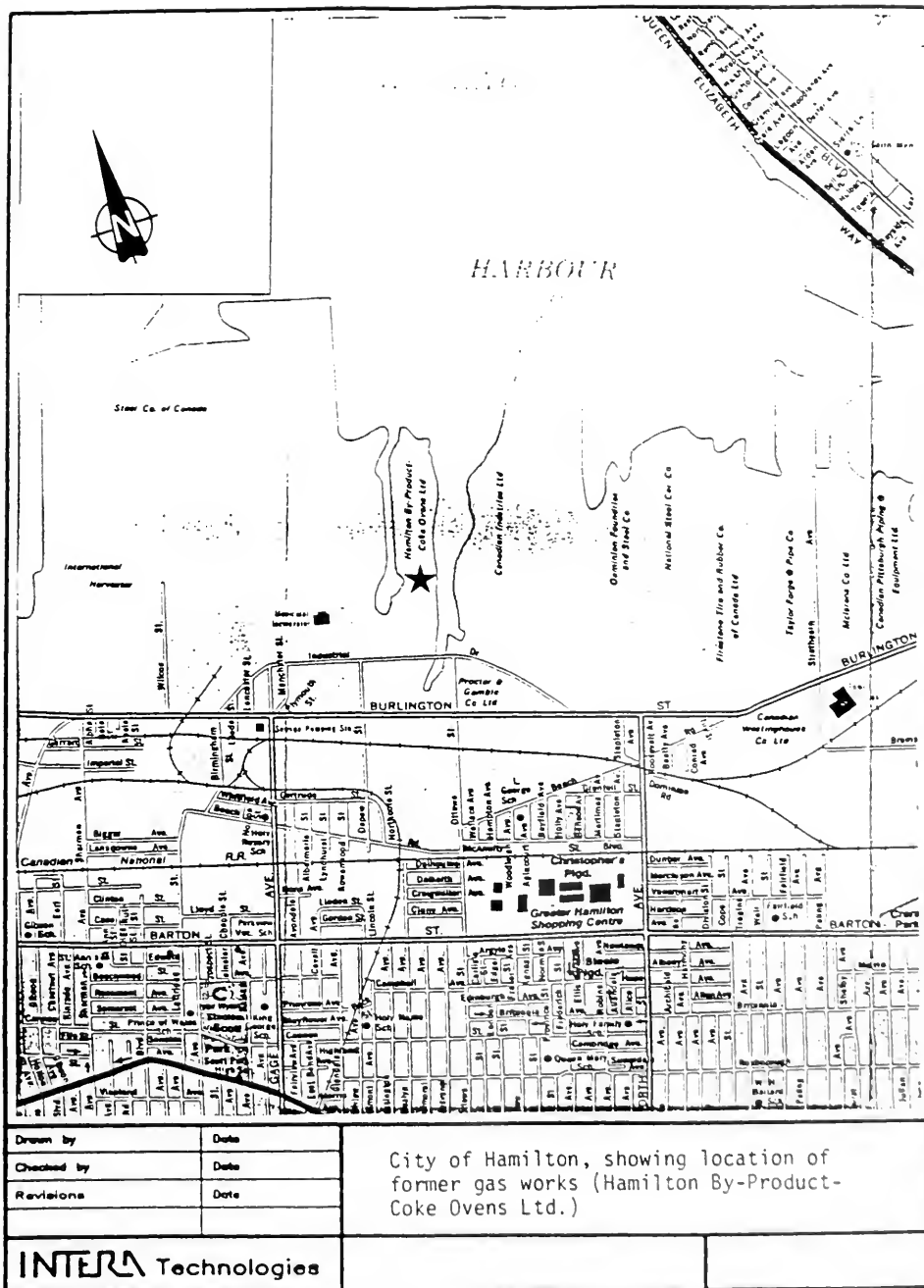
Use None

Proximity of Existing Wells None

Site Investigations 1959 soil borings for construction of Proctor and Gamble warehouse

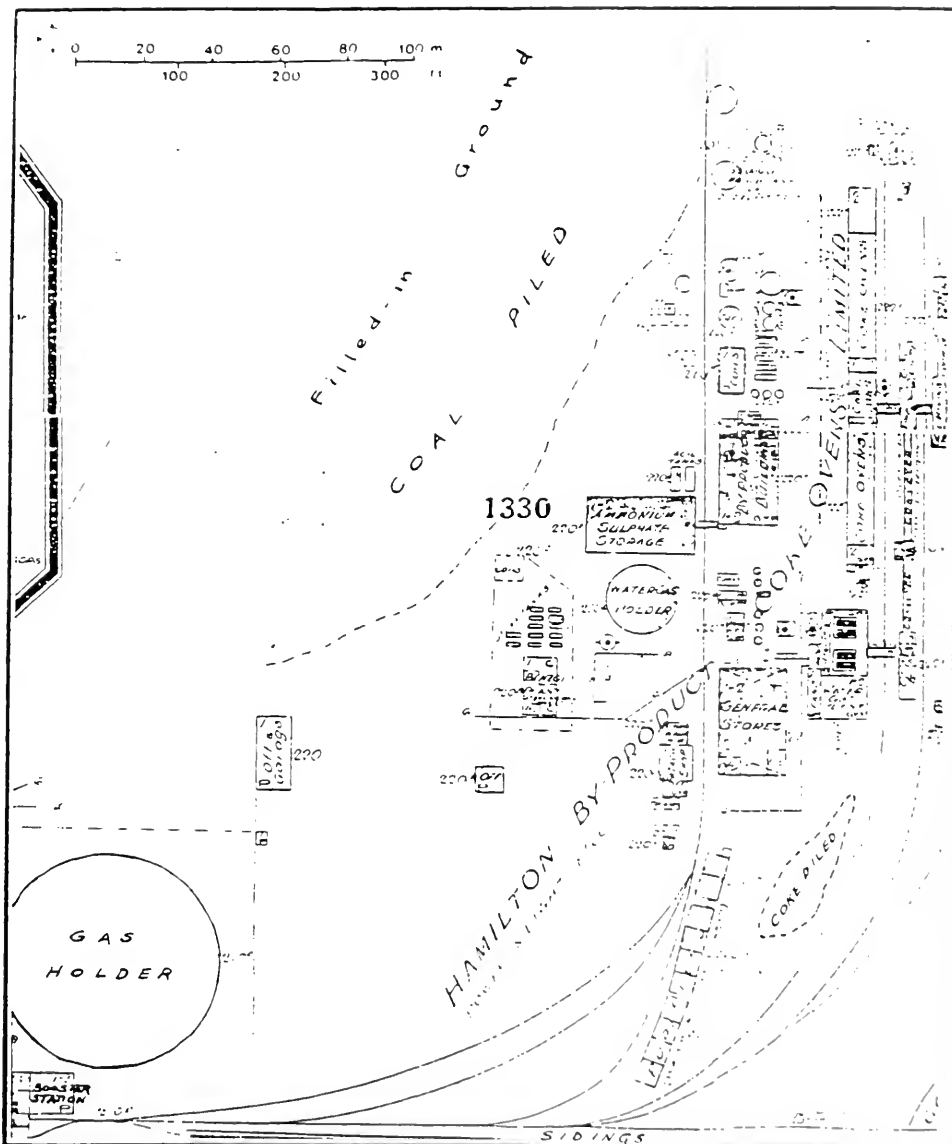
6. Comments/Remarks: A heavy industrial area, the adjacent surface water body (Hamilton Harbour) is heavily contaminated with hydrocarbons. Impossible to distinguish gas plant wastes from other industrial wastes disposed in the area of the site

7. Off-Site Disposal Areas: Uncertain, likely adjacent Hamilton Harbour



City of Hamilton, showing location of
former gas works (Hamilton By-Product-
Coke Ovens Ltd.)

INTERA Technologies



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Checked by	Date
Revisions	Date

1941 Plan of Hamilton By-Products Gas Works.
(Source: Regional Collection, University
of Western Ontario, sheet 301)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. **Site Location:**

City Kitchener Street Address West & East sides of Gaukel,
Joseph and Charles Streets
MOE Region West Central
MOE District Cambridge NTS Map Sheet 40 P/8

Historical Maps Available 1904 - fire insurance plan (Regional Collection, University of Western Ontario), sheet 2 and key; 1947 - revision of 1908 fire insurance plan (Public Archives Canada, NMC 9506, 2/54)

2. **Site Identification:**

Name Kitchener Gas Works
Type of Facility Coal gasification (1882-1944), carburetted water gas (1944-1958)
Operator(s) and Period(s) of Operation Berlin Gas Co. (1882-1912); Berlin Light and Heat Commission (1912-1920), Kitchener Light and Heat Commission (1920-1924)
Public Utilities Commission of Kitchener (1924-1958)

3. **Site Characteristics:**

Size (when operated) Large, 0.9 hectares
Present Land Use Post office and parking (corner of Gaukel and Charles Streets), Bus Terminal and parking
Planned Land Use Bus Transit Mall planned for Bus Depot
Present Occupant(s) Gray Coach Bus Lines Ltd., Canadian Postal Corporation
Present Land Use Adjoining Properties N-gas station and furniture store, E-small commercial building, S-residential and parkland, W-King St. Shopping Centre
Underground Utilities Sanitary and storm sewers, water and gas mains, Bell Canada Lines and Hydro Lines along Gaukel, Joseph and Charles Streets
Soil Conditions 2-3 m of fill on top of permeable material (previously swamp) hydraulically connected to Victoria Park Lake
Site Access Uncontrolled access

4. **Evidence of Buried Wastes:**

Operating Period 1882-1958

Excavation History Post Office (1962), Bell Canada Services Lines and Manhole

Visible Wastes Tar encountered during excavation for Post Office (1962), soil investigation frequently encountered tar (1986)

Odour None reported or very likely during excavation for Post Office

Water Pollution Bell Canada manhole filled with water and tar (1986)

5. **Resource Characteristics:**

Surface Water Victoria Park Lake

Proximity 1 km south

Use Recreational

Groundwater, Proximity High water table

Use None reported

Proximity of Existing Wells None reported

Site Investigations Several boreholes have been completed as part of site assessment for coal tar contamination

6. **Comments/Remarks:** Water table in area fluctuates with the water level in Victoria Park

7. **Off-Site Disposal Areas:** Material is known to have been dumped beside the railway near Hoqq Fuel and Supply Ltd., Lot 3, Part 7



Drawn by	Date
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City of Kitchener, showing location of former gas works.

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SEE SHEET NO. 23

JOSEPH

CHARLES

GAUKEL

THE INTER-PROVINCIAL SURVEY BUREAU
has been established and is located on the
first floor of the building over the
Inter-Provinceal Insurance Co. Ltd.
and it is to be insured on record to the
BY BUREAU, LIMITED (Toronto and Montreal)

REGISTERED AT OTTAWA
BY THE
INTER-PROVINCIAL SURVEY BUREAU LIMITED
- ALL AND TORONTO

SCALE 50 FT = 1 INCH



SEE SHEET NO. 23

JOSEPH

ARLES

0 10 20 30 40 50 m
50 100 150 11

Drawn by	Date
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1947 Plan of Kitchener Gas Works,
(Source: Fire insurance plan, Public
Archives Canada, NMC-9506,2/54)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. **Site Location:**

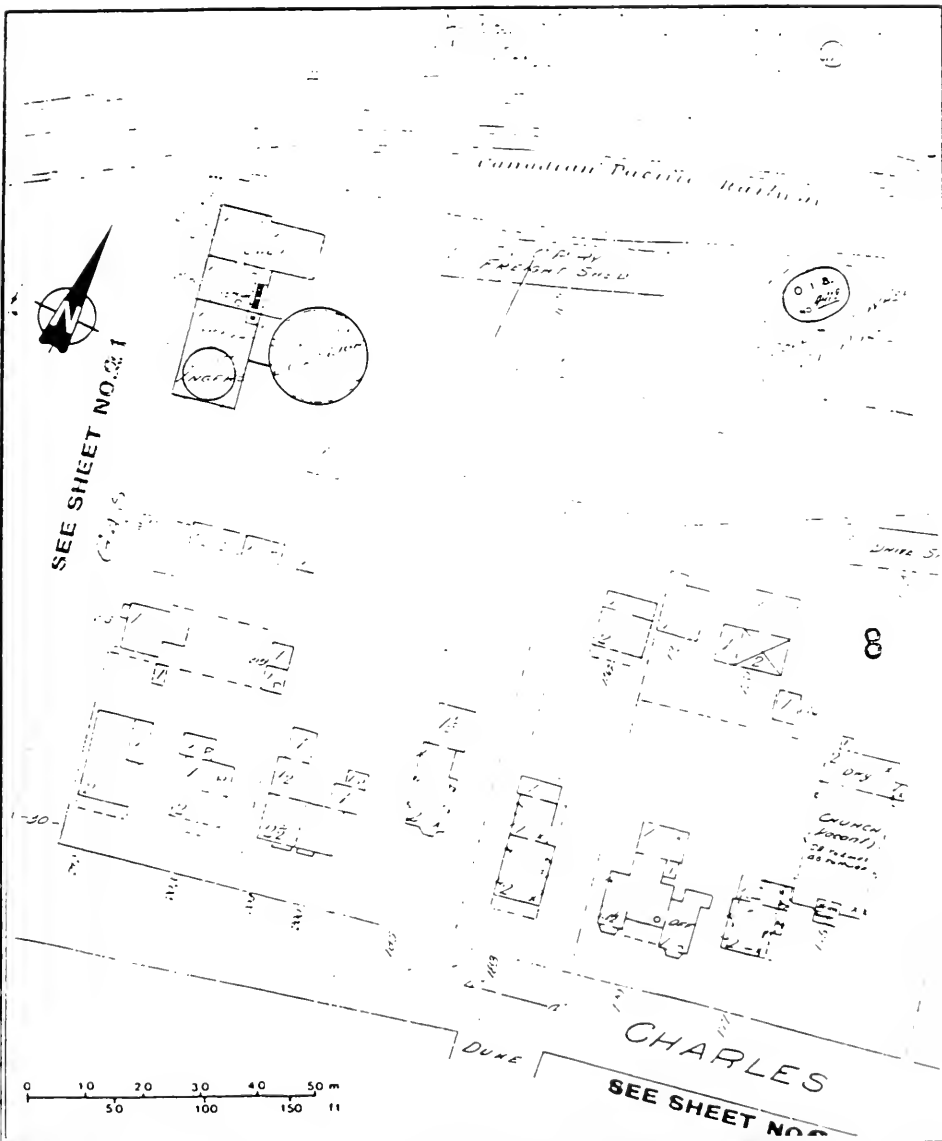
City Kingston Street Address Bounding blocks, Place D'Armes
Ontario, King and Queen Streets
MOE Region Southeastern
MOE District Kingston NTS Map Sheet 31 C/2
Historical Maps Available see attached sheet

2. **Site Identification:**

Name Kingston Gas Works
Type of Facility Coal gasification (1848-1925) carburetted water gas (1925-1950)
propane gas (1950-1957)
Operator(s) and Period(s) of Operation City of Kingston Gas Light Co. (1848-1891)
Kingston Light, Heat and Power Co. (1891-1913), Kingston Public Utilities Commission
(1913-1958)

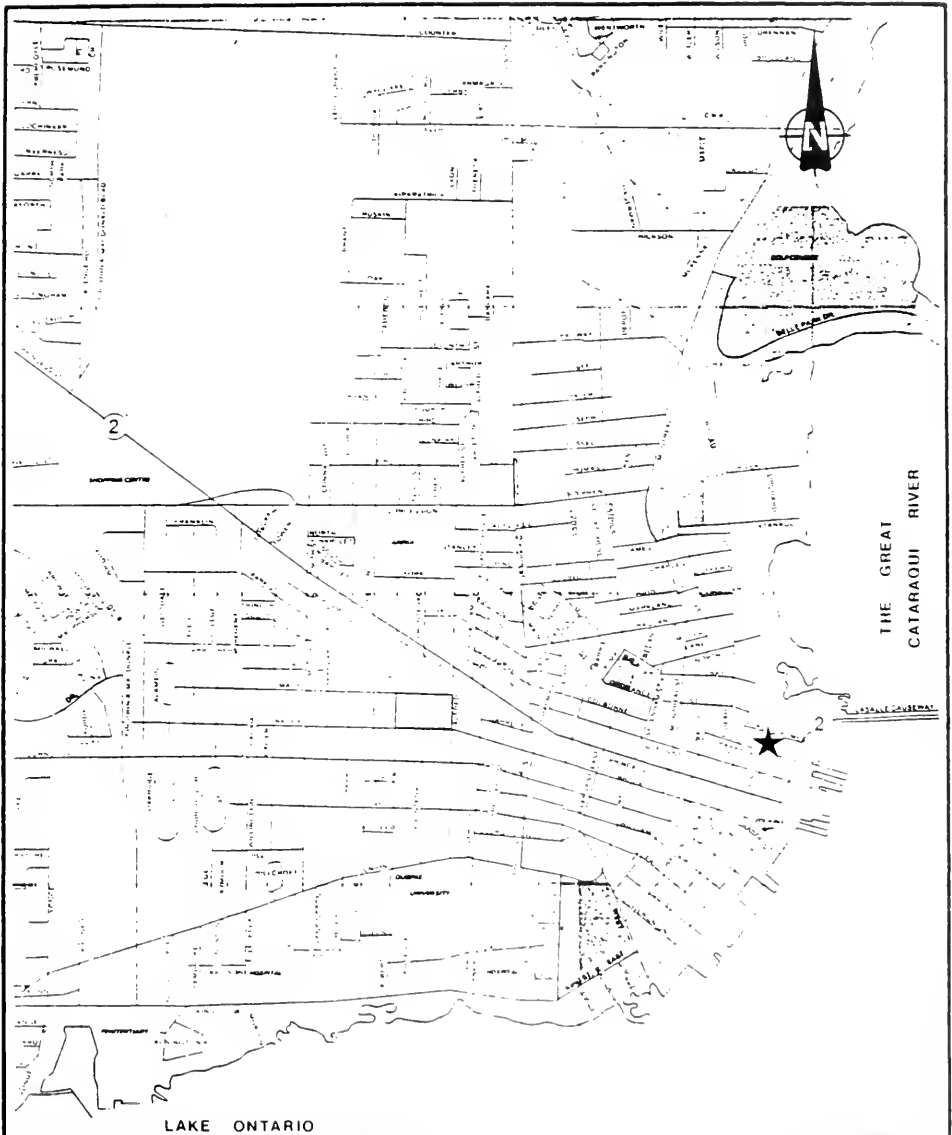
3. **Site Characteristics:**

Size (when operated) Large 1.6 ha
Present Land Use Commercial and institutional, some residential
Planned Land Use As is
Present Occupant(s) Public Utilities Commission, bus garage, office, parking
lot, Kingston Hydro substation, Retail stores, Police Station parking garage
Present Land Use Adjoining Properties N-industrial, E-Police Station - commercial
S-parking lot, W-commercial, parking lot
Underground Utilities Gas mains, watermain, old sewer along King Street, Barrack
Street, Place D'Armes and Ontario Street, interception sewer along Ontario Street
Soil Conditions Unknown fill assumed
Site Access Uncontrolled access



Drawn by	Date
Checked by	Date
Revisions	Date

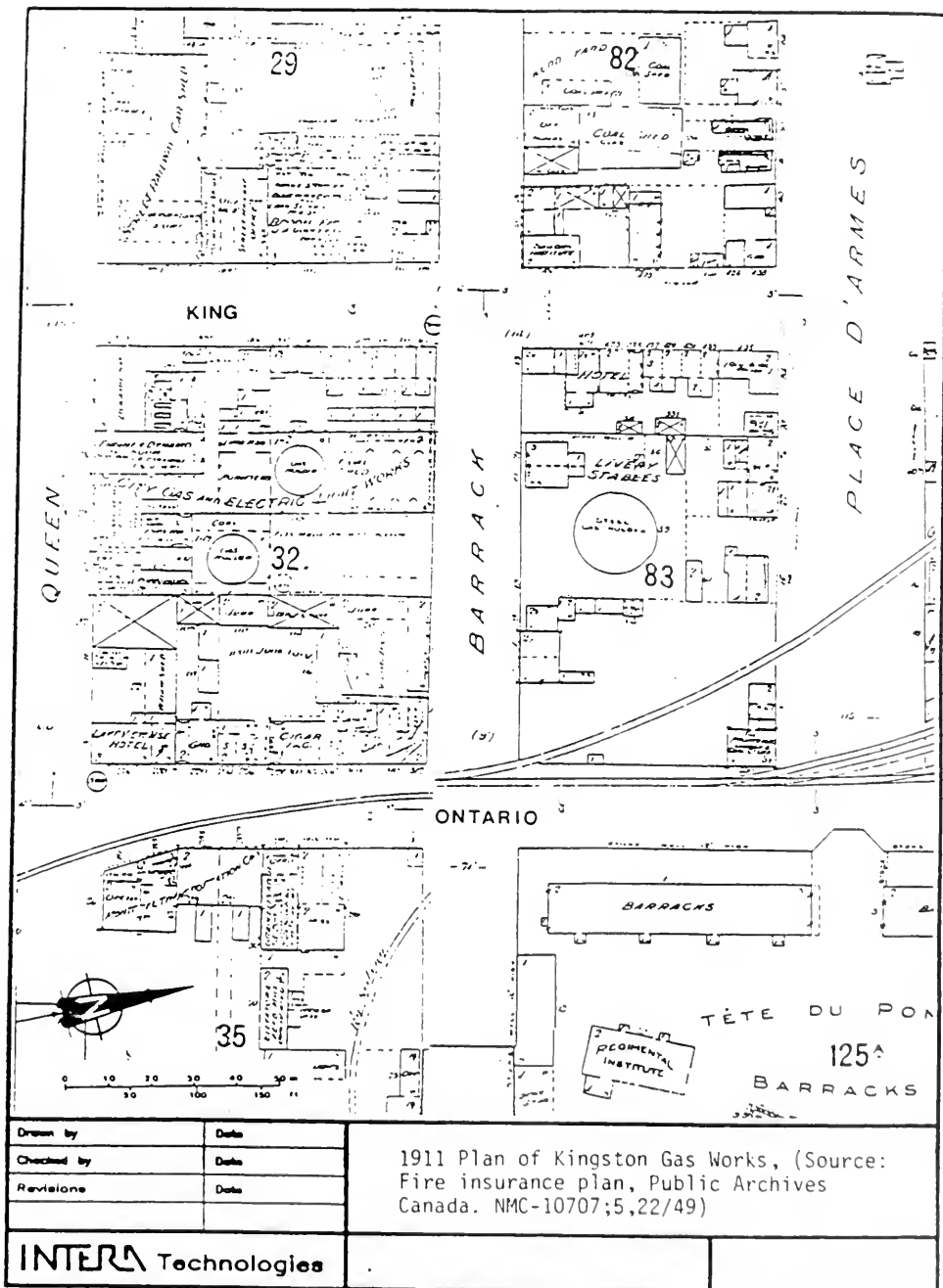
1913 Plan of Ingersoll Gas Works, (Source: Fire insurance plan, Public Archives Canada, NMC-11965, sheet 2)



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Revisions	Date

City of Kingston, showing location of former gas works.

INTERA Technologies



Drawn by	Date
Checked by	Date
Revisions	Date

1911 Plan of Kingston Gas Works, (Source: Fire insurance plan, Public Archives Canada. NMC-10707;5,22/49)

INTERA Technologies

4. **Evidence of Buried Wastes:**

Operating Period 1848-1957, 109 years

Excavation History Police station, underground garages (1971), no wastes encountered

King Street sewer excavation (1986), tar excavated

Visible Wastes 60 m³ of tar contaminated soil and rock removed from King Street sewer excavation north of Place D'Armes Street

Odour None reported or observed

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Lake Ontario - Great Cataraqui River

Proximity 150 m northeast

Use Recreation

Groundwater, Proximity Unknown

Use None reported

Proximity of Existing Wells None reported

Site Investigations None reported

6. **Comments/Remarks:** 60 m³ of tar contaminated fill excavated and removed during sewer reconstruction, north of Place D'Armes; disposition of waste unknown

7. **Off-Site Disposal Areas:** Spent oxide wastes likely disposed on west side of Great Cataraqui River between the corner of Wellington Street and Bay Street, and the corner of Montreal and Railway Streets. Some tar disposal likely north of Place D'Armes Street

Historical Maps Available

- 1865 - fortification survey (Public Archives Canada, NMC 21076, 2/2);
- 1875 - bird's eye view (Public Archives Canada, NMC 22439) blow up;
- 1908 - fire insurance plan (Public Archives Canada)
- 1911 - revision of 1908 fire insurance plans (Public Archives Canada, NMC 10707, 5/49 main site; 22/49 auxillary gas holder)
- 1924 - fire insurance plan (Kingston Public Utilities Commission)
- 1928 - block plan of land and buildings owned by Commission (Kingston Public Utilities Commission)
- 1948 - block plan of gas holder property (Kingston Public Utilities Commission)
- 1963 - fire insurance plan (Public Archives Canada)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Ingersoll Street Address 83 Avonlea St.
end of Avonlea St. at railway tracks
MOE Region Southwestern
MOE District London NTS Map Sheet 40 P/2
Historical Maps Available See attached sheet

2. Site Identification:

Name Ingersoll Gas Works
Type of Facility Coal gasification
Operator(s) and Period(s) of Operation Ingersoll Gas Light Co. (1876-1915)

3. Site Characteristics:

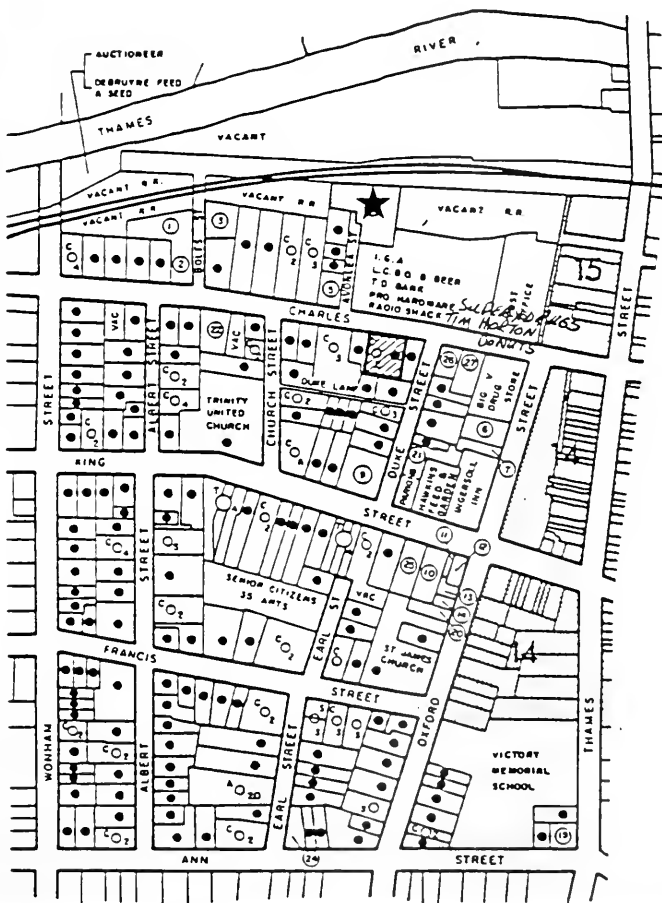
Size (when operated) Small, 0.2 hectares
Present Land Use Storage area and business office
Planned Land Use As is
Present Occupant(s) Daves Plumbing and Heating
Present Land Use Adjoining Properties N-vacant lot, E-vacant lot, IGA, Liquor Store, Brewers Retail and Tim Horton Donuts, S-single and multiple residences, W-vacant lot
Underground Utilities Storm and sanitary sewers along Avonlea Street
Soil Conditions Fill assumed
Site Access Controlled access

Historical Maps Available

- 1875 - Bird's eye view (Public Archives Canada, NMC 22392), blow up
- 1904 - Revision of 1885 fire insurance plan (Regional Collection, University Western Ontario), key.
- 1913 - Fire insurance plan (Public Archives Canada, NMC 11965, 1/21, 2/21)
- 1932 - Revision of 1913 fire insurance plan (Public Archives Canada, NMC 9485 2/21)

TOWN OF INGERSOLL

SCALE 1 5,000



Drawn by	Date
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Revisions	Date

Town of Ingersoll, showing location of former gas works.

INTERA Technologies

4. **Evidence of Buried Wastes:**

Operating Period 1876-1915 (39 years)

Excavation History None reported, no basements in area

Visible Wastes None reported or observed

Odour Strong odour reported from underground pipe in one of the original gas plant buildings

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Thames River

Proximity 100 m northwest

Use Recreational, industrial

Groundwater, Proximity Unknown

Use Water supply, 5 wells

Proximity of Existing Wells Approximately 500 m away. The wells are 120 m deep drawing water from limestone in the Detroit River Group

Site Investigations None reported

6. **Comments/Remarks:** Small site

7. **Off-Site Disposal Areas:** No information on off-site disposal areas

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Hamilton Street Address North & South of Mulberry St.

between Bay North and Park North St.

MOE Region West Central

MOE District Hamilton NTS Map Sheet 30 M/5

Historical Maps Available: 1878 fire insurance plan (Public Archives Canada, NMC 16617), sheet 7; 1927 fire insurance plan (Public Archives Canada) Vol. 1, 118; 1933 revision of 1927 fire insurance plan (Public Archives Canada), Vol. 1, 118 stripped material; 1947 revision of 1927 fire insurance plan (Public Archives Canada) 118 of 173; 1964 fire insurance plan (Public Archives Canada) sheet 118

2. Site Identification:

Name Hamilton, Mulberry St. Gas Works

Type of Facility Retort coal gasification

Operator(s) and Period(s) of Operation Hamilton Gas Light Co. (1850-1913):

United Gas and Fuel Co. of Hamilton (1913-1925)

3. Site Characteristics:

Size (when operated) Large 1-2 hectare

Present Land Use Public institutional (Separate School Board): commercial
light industrial (scrap yard)

Planned Land Use As is

Present Occupant(s) Bell Canada garage and storage area; Canadian Iron & Metal
Co. scrap yard; Hamilton Wentworth Separate School Board

Present Land Use Adjoining Properties N-residences, parking lot, E-residences,
commercial, S-light industrial, commercial, W-residences

Underground Utilities Combined sewers along Mulberry St, Bay North & Park N. Sts

Soil Conditions Unknown, fill assumed

Site Access Controlled access by fencing around Bell Canada, Separate School
Board and Canadian Iron and Metal Co. properties

4. **Evidence of Buried Wastes:**

Operating Period 1850? - 1905? about 75 years

Excavation History Bell Canada building with basement constructed in 1948, no wastes reported

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Burlington Bay (Lake Ontario)

Proximity 600 m north

Use Industrial

Groundwater, Proximity Unknown

Use None reported

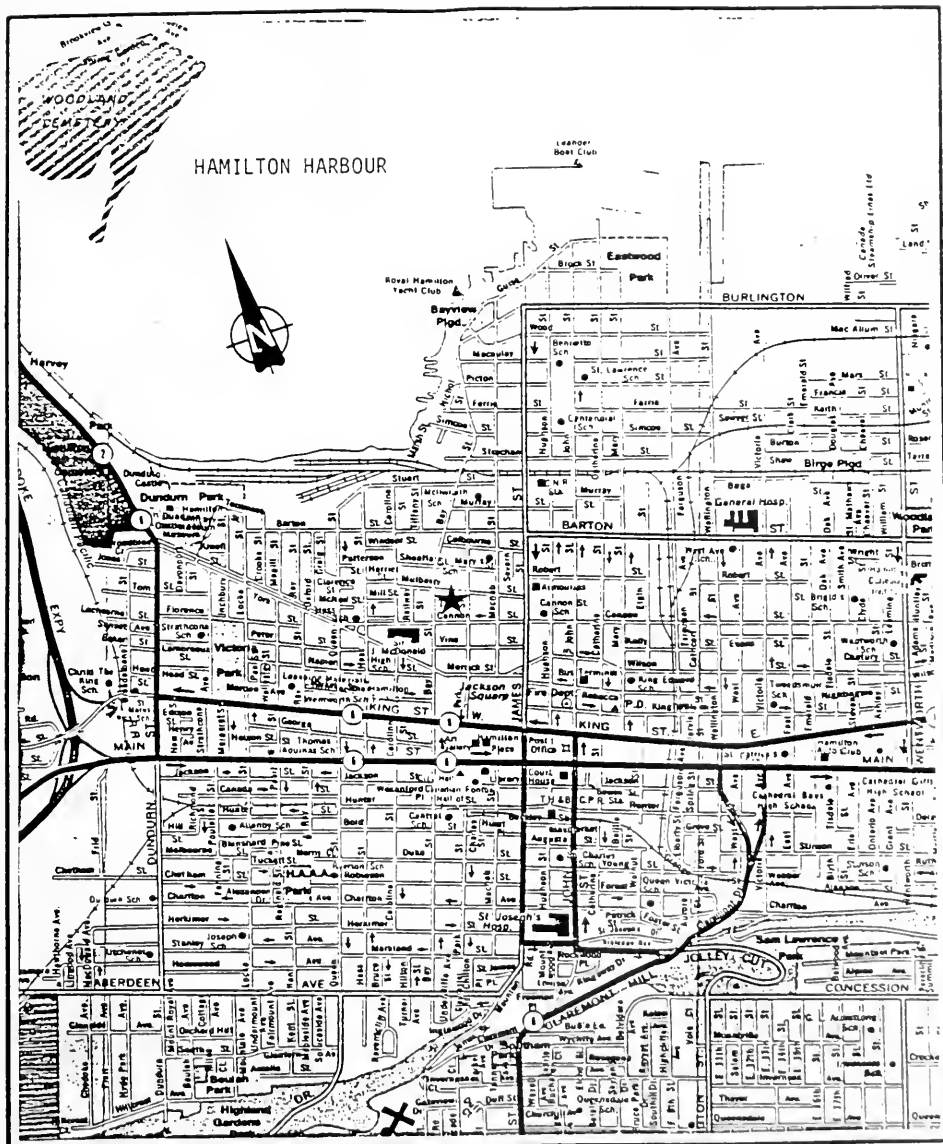
Proximity of Existing Wells None reported

Site Investigations Unknown

6. **Comments/Remarks:**

7. **Off-Site Disposal Areas:**

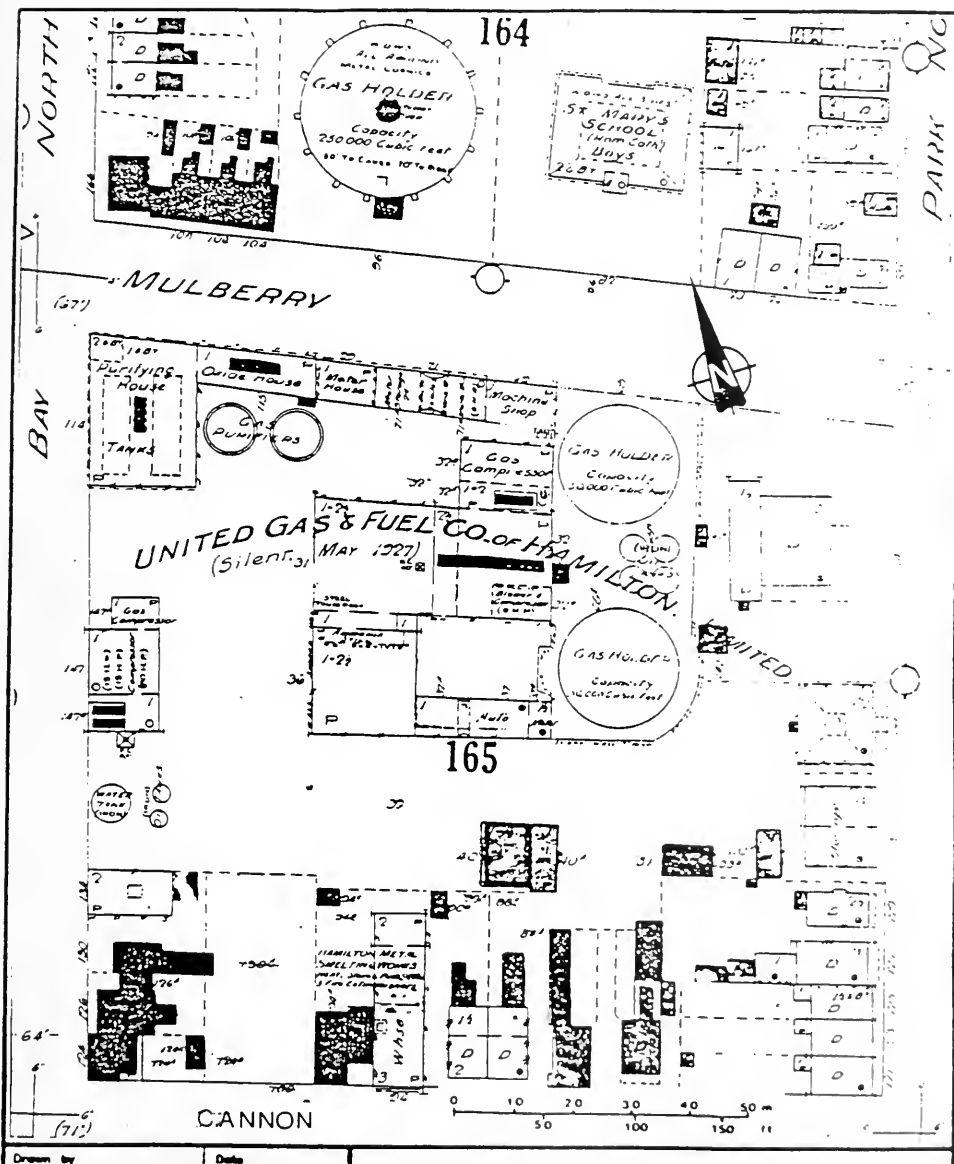
Tars likely sold to Currie Products Ltd. located one block west at Mulberry St and Caroline St.



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City of Hamilton, showing location of former gas works (Mulberry Street)

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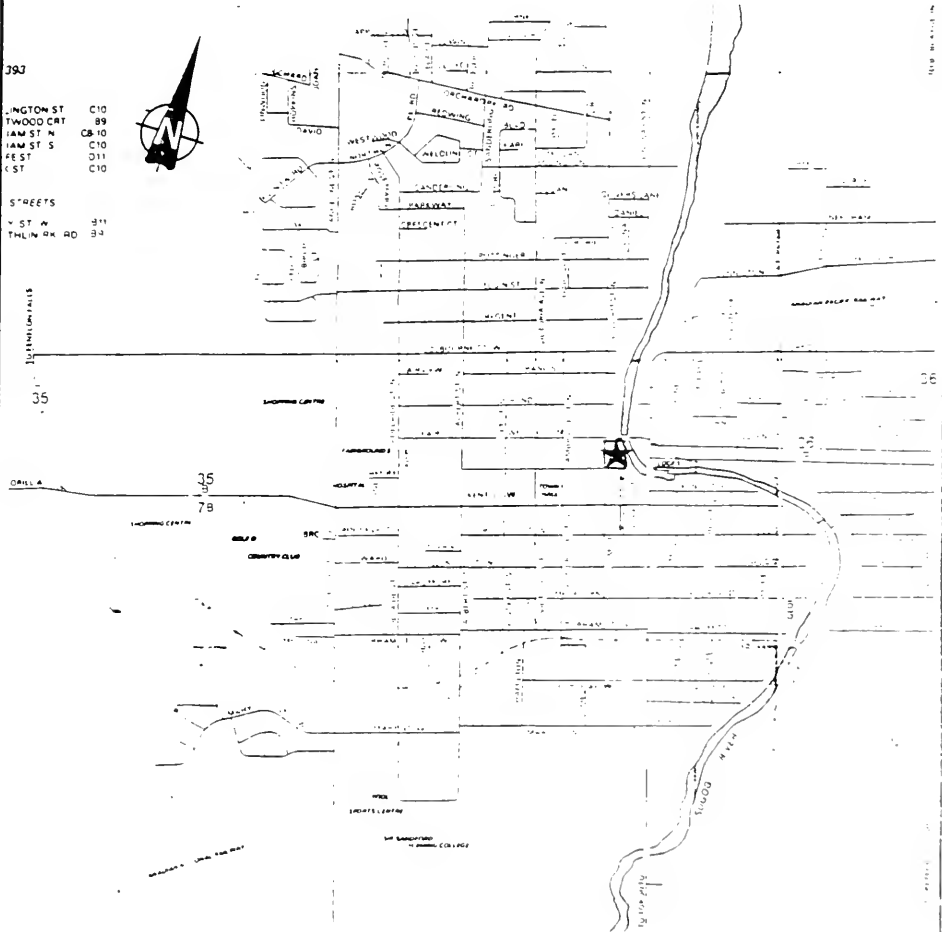
1927 Plan of Hamilton (Mulberry St.)
Gas Works, (Source: Public Archives
Canada, Vol.1, Pg.118)

INTERA Technologies

393

JINGTON ST C10
 TWOOD CRT 89
 IAW ST N C8-10
 IAW ST S C10
 4E ST C11
 6 ST C10

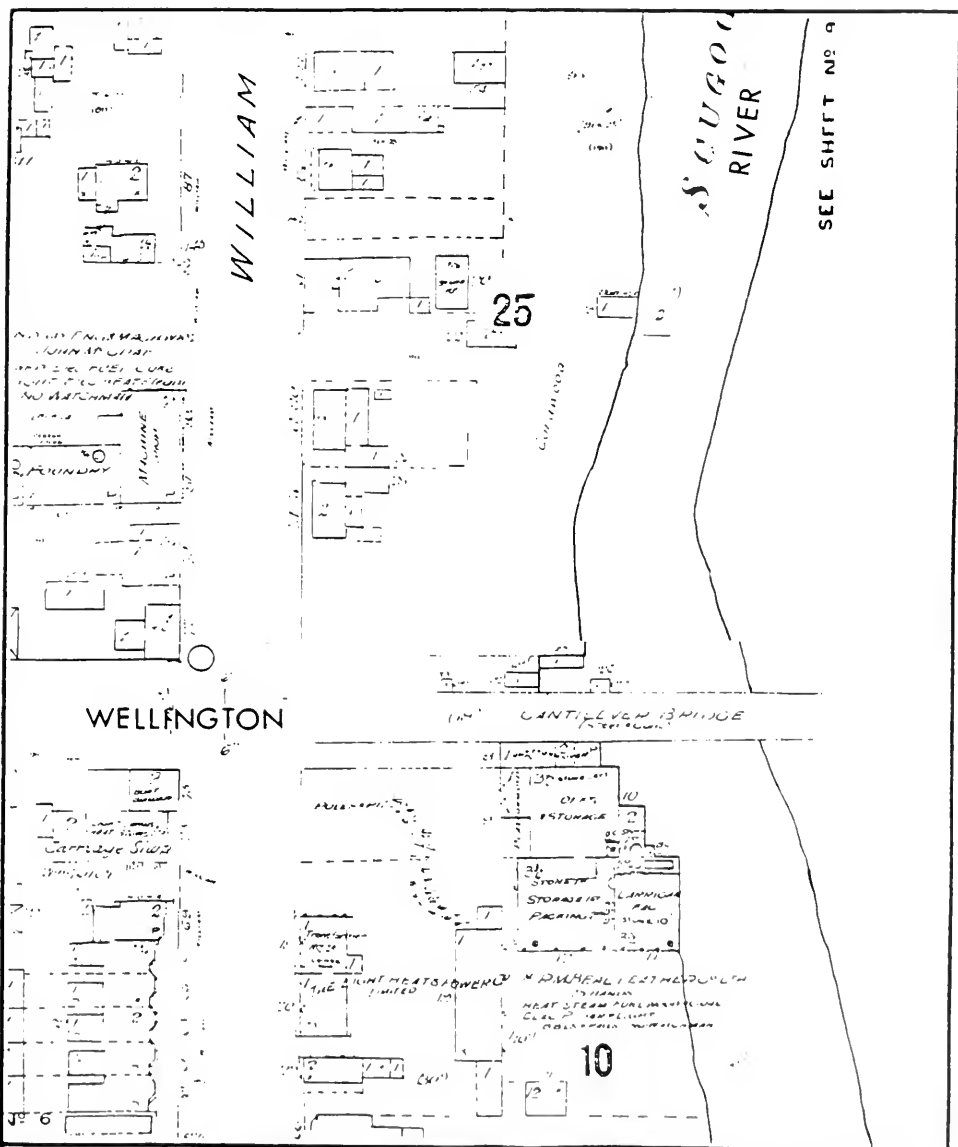
STREETS
 Y ST W 311
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Town of Lindsay, showing location of former gas works.

INTERA Technologies



SEE SHEET NO 9

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1911 Plan of Lindsay Light, Heat and Power Co.,
(Source: Fire insurance plan, Public Archives
Canada, NMC-9521, 4/18)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Listowel Street Address 46 Elma Street West between

Livingstone Avenue East and Maitland River

MOE Region Southwestern

MOE District London NTS Map Sheet 40 P/15 & P/10

Historical Maps Available 1913 fire insurance plan (Public Archives Canada, NMC 9523, (1/4, 2/4, 3/4); Undetermined stage post 1913 - fire insurance plan (Regional Collection, University of Western Ontario), Sheet 2 & 3; 1937 - fire insurance plan (Regional Collection, University of Western Ontario), Sheet 3

2. Site Identification:

Name Listowel Gas Works

Type of Facility Retort coal gasification

Operator(s) and Period(s) of Operation Listowel Gas & Electric Light Co.

(1891 - 1915)

3. Site Characteristics:

Size (when operated) Small, 0.2 hectare

Present Land Use Furniture factory (industrial manufacturing), Bonsma pools
(commercial)

Planned Land Use As is

Present Occupant(s) Andrew Malcolm Furniture Ltd.

Present Land Use Adjoining Properties N-lumber yard, E-lumber storage & river,
S-Morris Oil, W-assumed residential

Underground Utilities Storm sewers and watermain on Elma Street

Soil Conditions Unknown, fill assumed

Site Access Semi-controlled, limited access due to industrial area

4. Evidence of Buried Wastes:

Operating Period 1891 - 1915, 24 years

Excavation History Demolition of gas works (date unknown)

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Maitland River

Proximity 80 m southeast

Use Recreational

Groundwater, Proximity 3 wells for water supply at Wallace and Elizabeth Streets

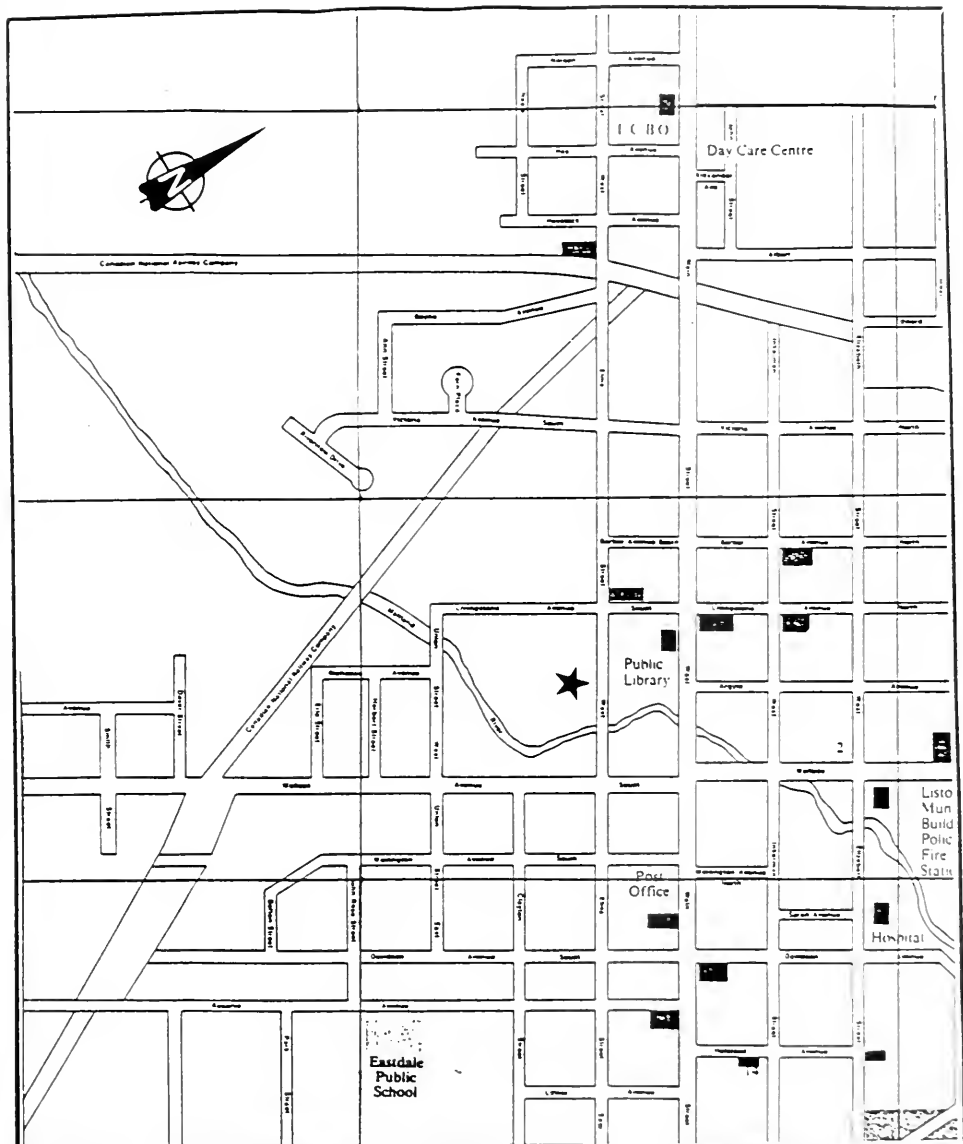
Use Drinking water

Proximity of Existing Wells Wallace and Elizabeth Street (water supply)

Site Investigations none reported in area

6. Comments/Remarks:

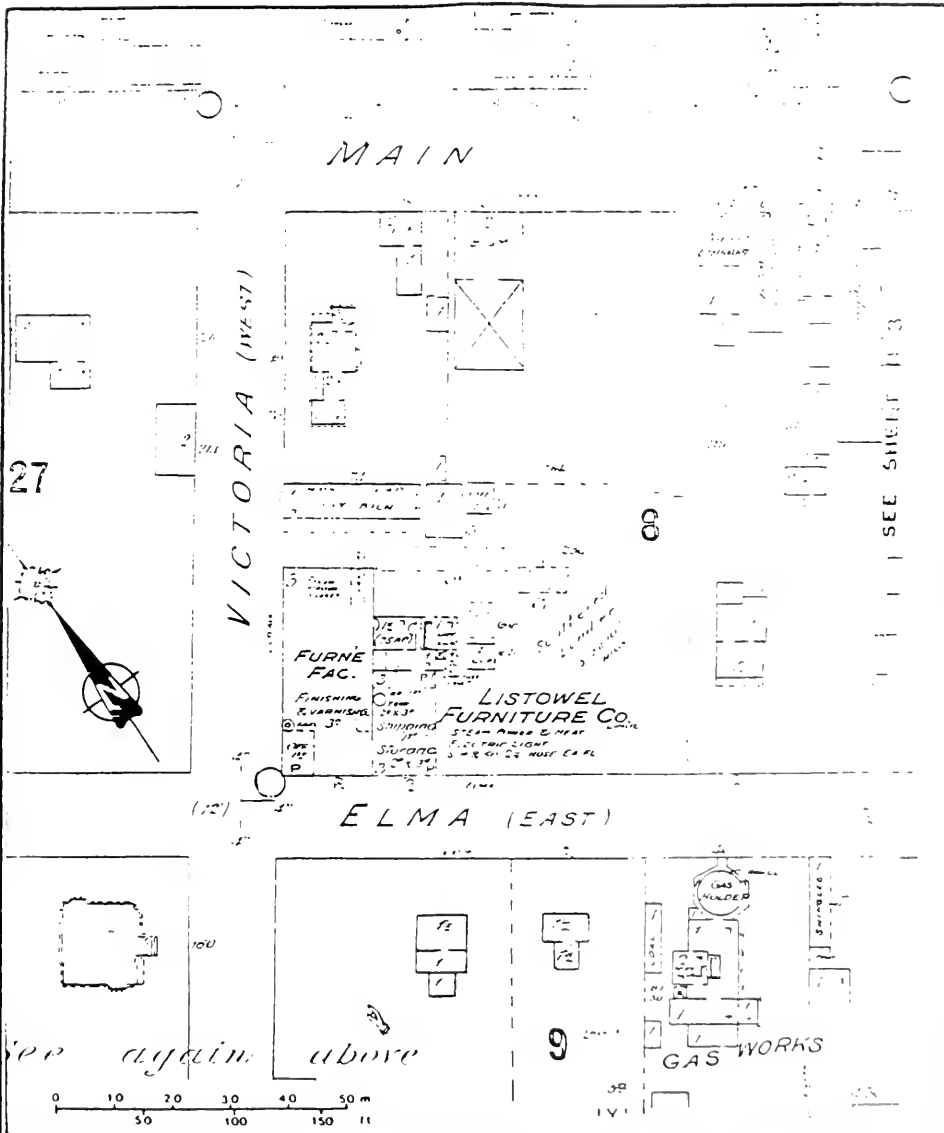
7. Off-Site Disposal Areas: None known



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Town of Listowel, showing location of former gas works.

INTERA Technologies



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1913 Plan of Listowel Gas Works, (Source: Fire insurance plan, Public Archives Canada, NMC-9523,1/4)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City London Street Address Ridout Street area bounded by
Thames, Horton, Simcoe, Bathurst and Ridout Sts.
MOE Region Southwestern
MOE District London NTS Map Sheet 40 I/14
Historical Maps Available See attached sheet

2. Site Identification:

Name London Gas Works
Type of Facility Retort coal gasification
Operator(s) and Period(s) of Operation London Gas Co. (1853-1864), City Gas Co.
of London (1864-1931), Union Gas Co. (1931-1939)

3. Site Characteristics:

Size (when operated) Large, 2 hectares
Present Land Use Vacant lot (temporary parking) gas holding tank east side
Ridout is vacant (zoned commercial, industrial and residential)
Planned Land Use Residential and commercial development
Present Occupant(s) City of London (vacant), Ault Foods c/o Silverwood Dairies
Present Land Use Adjoining Properties N-commercial, E-Labatts, S-Thames River and
park, W-residential
Underground Utilities Storm and sanitary sewers along Talbot, Bathurst, Horton
Ridout and Thames Streets, storm sewer from the corner of Ridout Street to the
Thames River
Soil Conditions Fill and alluvial material over till
Site Access Uncontrolled access

Historical Maps Available

Maps: all located in Regional Collection, University of Western Ontario

1888 - revisions of 1881 fire insurance plan, sheet 6

1915 - revisions of 1912 fire insurance plan, sheet 6, 54

1929 - revisions of 1912 fire insurance plan, sheet 6, 54

1940 - revisions of 1912 fire insurance plan, sheet 6 (12), 54

1949 - fire insurance plan, sheets 38, 39 (40)

1958 - fire insurance plan, sheets 48 (49), 243

4. **Evidence of Buried Wastes:**

Operating Period 1853 - 1939

Excavation History Sewer and bridge construction (presently occurring), Public Utilities Commission building (1985), Horton Street Extension (1983)

Visible Wastes Oil and tar were observed in all the above excavations

Odour No reports but most likely present during excavations

Water Pollution PAHs confirmed in the Thames River (1987) and in water sampled from the PUC excavation (1985)

5. **Resource Characteristics:**

Surface Water Thames River

Proximity Borders south and southwest edge of site

Use Recreational, industrial

Groundwater, Proximity 2-3 m below ground surface

Use Not used

Proximity of Existing Wells None reported in area

Site Investigations Investigations all encountered tar in (1983, 1985, present)

6. **Comments/Remarks:** Significant off-site occurrences of tarry material indicates off-site migration of wastes. Thames river occurrence of tar is likely disposal area

7. **Off-Site Disposal Areas:** No confirmed off-site disposal areas



City of London, showing location of former gas works.

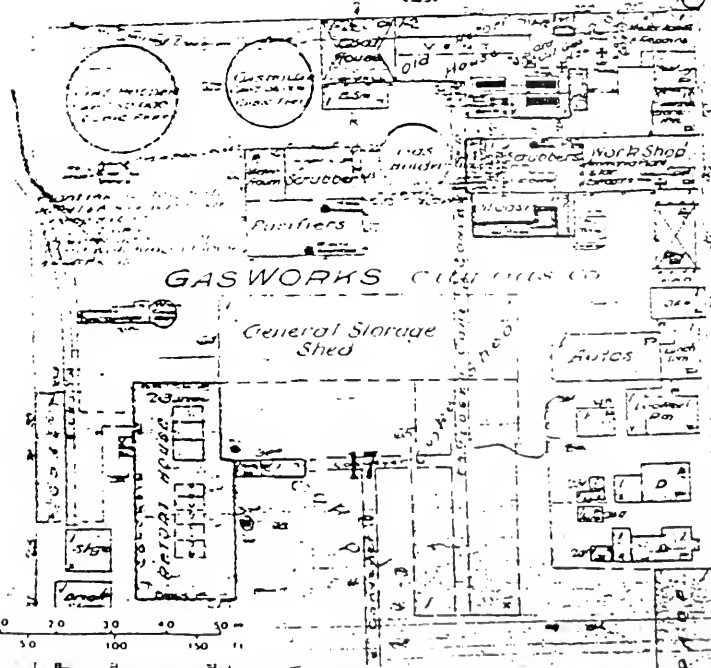
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SEE SHEET NO. 5

BATHURST

RIDOUT

HORTON



NO EXPOSURE

SEE SHEET NO. 12

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1915 Plan of London Gas Works, (Source: Fire insurance plan, Regional Collection, University of Western Ontario, sheet 6)

INTERA Technologies

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Napanee Street Address 96 Water Street, bounded by
West, Water, Robert Streets Napanee River
MOE Region Southeastern
MOE District Kingston NTS Map Sheet 31 C/2
Historical Maps Available 1879 - Briggs map, "Napanee" Public Archives Canada
NMC 20845); 1917 - revision of 1904 fire insurance plan (Regional Collection, Univ
of Western Ontario), Sheet 6; 1931 fire insurance plan (Public Archives Canada,
NMC 9570 7/13)

2. Site Identification:

Name Napanee Gas Works
Type of Facility Coal gasification with some petroleum gasification until 1900
Operator(s) and Period(s) of Operation Napanee Water-Electric Co. (1880-1911);
Seymour Power & Electric Co. (1911-1916); Hydro-Electric Commission (1916-1931)

3. Site Characteristics:

Size (when operated) Small, 0.45 hectares
Present Land Use Orange Lodge Hall (public), Queen Elizabeth Senior Citizens
Home (residential); Marina (commercial, recreational); parking (public)
Planned Land Use as is, river bank stabilization plan proposed for 1987
Present Occupant(s) Orange Lodge Hall; Welding Shop; Queen Elizabeth Senior
Citizens Home; Marina
Present Land Use Adjoining Properties N - assumed residential; E - park land;
S - park land; W - residential
Underground Utilities Unknown
Soil Conditions Unknown, fill assumed
Site Access Uncontrolled

4. **Evidence of Buried Wastes:**

Operating Period 1880 - August 31, 1921; 41 years

Excavation History Welding shop built on site (time unknown); senior citizens bldg.
built on slab foundation (time unknown); 2 buildings demolished by town (recently)

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Napanee River

Proximity Borders the southern edge of site

Use Recreational

Groundwater, Proximity Unknown

Use Groundwater not likely used, water supply from Lake Ontario
16 km south.

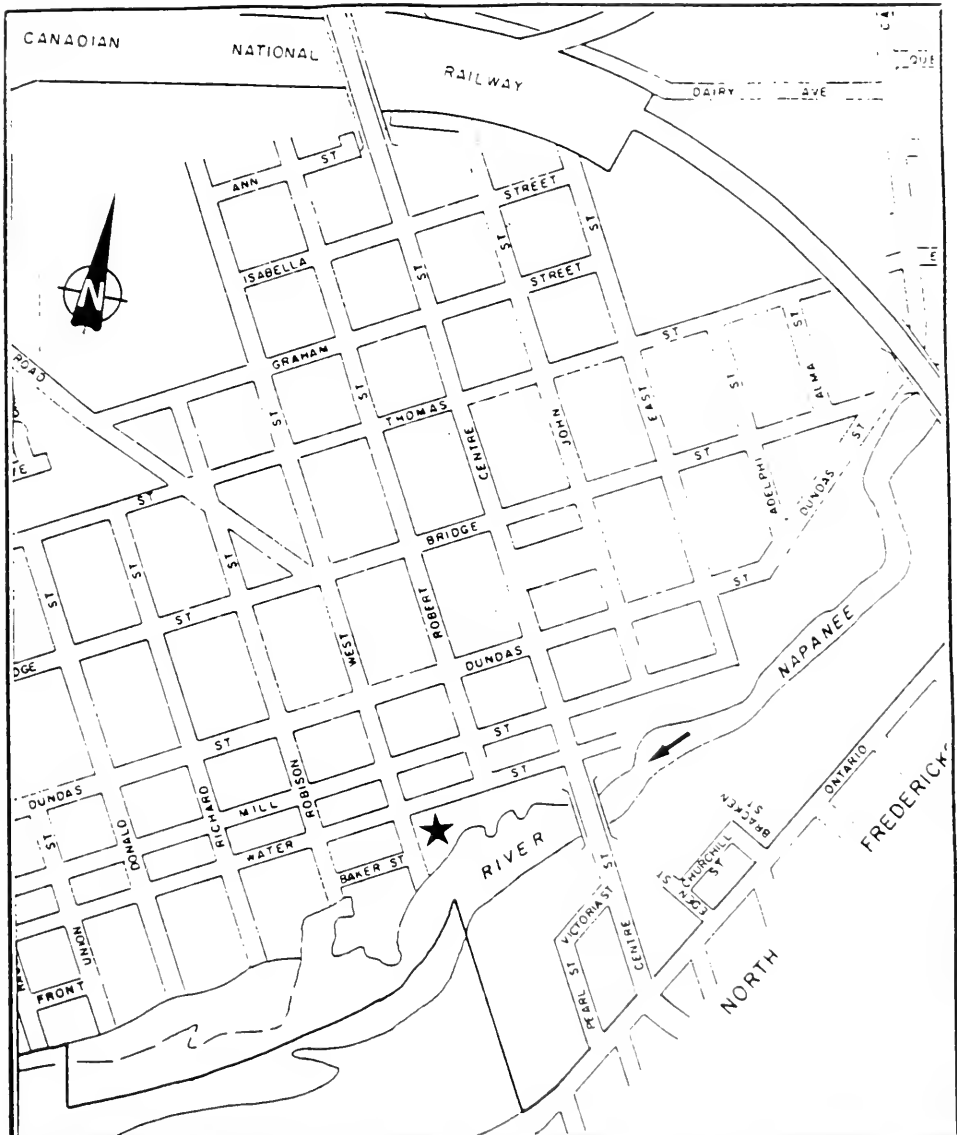
Proximity of Existing Wells There are historical wells in the area, but none within
1 mile of the site are currently in use.

Site Investigations None reported

6. **Comments/Remarks:** River bank stabilization plan proposed for 1987 is of concern
for this site

7. **Off-Site Disposal Areas:**

Possible off-site disposal on adjacent property near Napanee River and the
Centre St. Bridge



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Town of Napanee, showing location of former gas works.

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Oshawa Street Address Northwest corner of Centre &
Bond Streets
MOE Region Central
MOE District York-Durham NTS Map Sheet 30 M/15
Historical Maps Available No plant maps available

2. Site Identification:

Name Oshawa Gas Works (Bond St.)
Type of Facility Coal gasification
Operator(s) and Period(s) of Operation Oshawa Gas Co. (1903-1905), Private
(1905-1908), City Gas Co. (1908-1916), Hydro Electric Power Commission of Ont.
(1916-1928)

3. Site Characteristics:

Size (when operated) Uncertain (assumed small)
Present Land Use Commercial
Planned Land Use As is
Present Occupant(s) Durham Towers (8 storey office building); automotive
transmission shop
Present Land Use Adjoining Properties N, E, S, W - commercial

Underground Utilities watermain; storm and sanitary sewers along Bond & Church
Streets
Soil Conditions Fill over till over sand over till over limestone

Site Access Uncontrolled

4. Evidence of Buried Wastes:

Operating Period Before 1903 - before 1928, about 20 years

Excavation History Installation of storm sewer along Bond St. (1973), construction of Durham Towers Office building (1976) and transmission shop (1971); all with no wastes reported; excavation (1987) south of Bond St., and site - no wastes observed

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Oshawa Creek and Lake Ontario

Proximity 200 m west and 3.7 km south respectively

Use Recreation

Groundwater, Proximity 3-4 m below ground surface

Use Not likely used, water supply from Lake Ontario

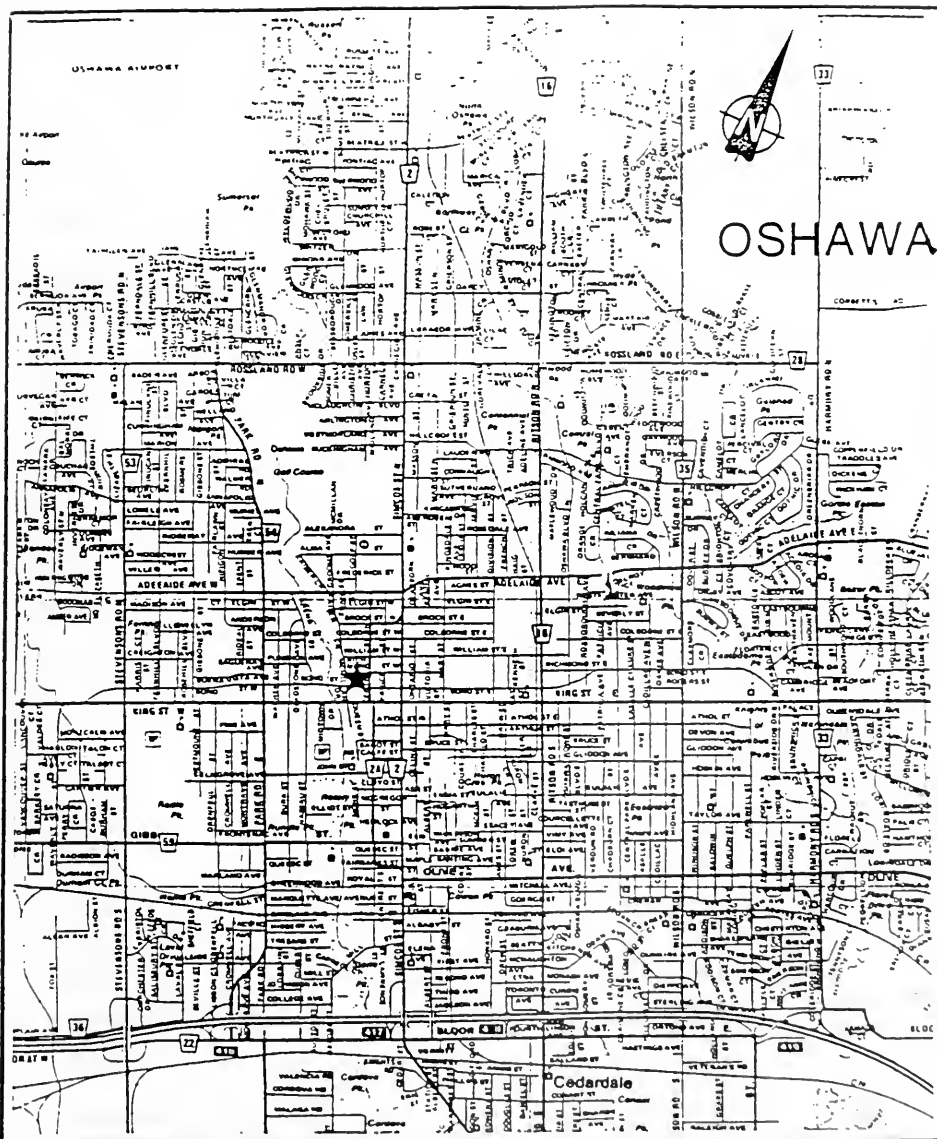
Proximity of Existing Wells None in impacted area

Site Investigations 1971 site inspection during foundation placement for transmission shop, 1976 soil borings for office tower

6. Comments/Remarks: Little information exists for this site. Plants existence confirmed in 1903 mortgage information

7. Off-Site Disposal Areas:

No information available



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City of Oshawa, showing location of
former gas works (Bond and Centre Sts.)

INTERA Technologies

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Oshawa Street Address 80 Emma Street at CN Railway
Line (old Prospect Street)
MOE Region Central
MOE District York-Durham NTS Map Sheet 30 M/15
Historical Maps Available 1921 Fire insurance plan (Public Archives Canada,
NMC 9603, 9/16); 1966 Fire insurance map (Public Archives Canada) Sheet 38

2. Site Identification:

Name Oshawa Gas Works (Emma Street)
Type of Facility Coal gasification (1901-1950), propane (1950-1954)
Operator(s) and Period(s) of Operation Oshawa Gas Company (1901-1916), Hydro-
Electric Power Commission of Ontario (1916-1927), The City of Oshawa and the
Oshawa Public Utilities Commission (1927-1930), Ontario Shore Gas Company Ltd.
(1927-1930)

3. Site Characteristics:

Size (when operated) Medium, 0.6 hectares
Present Land Use Consumers Gas Company (commercial)
Planned Land Use As is
Present Occupant(s) Consumers Gas Company
Present Land Use Adjoining Properties N-CN Railway storage yard, E-restaurant,
vacant land, S-Fuel storage and residential, W-residential vacant land
Underground Utilities Storm and sanitary sewers, and watermain along Emma Street
and Albert Street. Storm sewers running parallel to railway east of site.
Soil Conditions Fill assumed

Site Access Controlled by fence around Consumers Gas property

4. Evidence of Buried Wastes:

Operating Period 1901-1954, 53 years

Excavation History Building construction (1960-1971), no details available

Visible Wastes None observed, but waste is reported to be in ground over gasometer site (by former employee)

Odour None reported or observed. Consumers Gas completed air monitoring in building - results indicate no problem

Water Pollution None reported

5. Resource Characteristics:

Surface Water Oshawa Creek, Lake Ontario

Proximity 0.7 km west and 3 km south, respectively

Use Oshawa Creek - recreational

Groundwater, Proximity Unknown

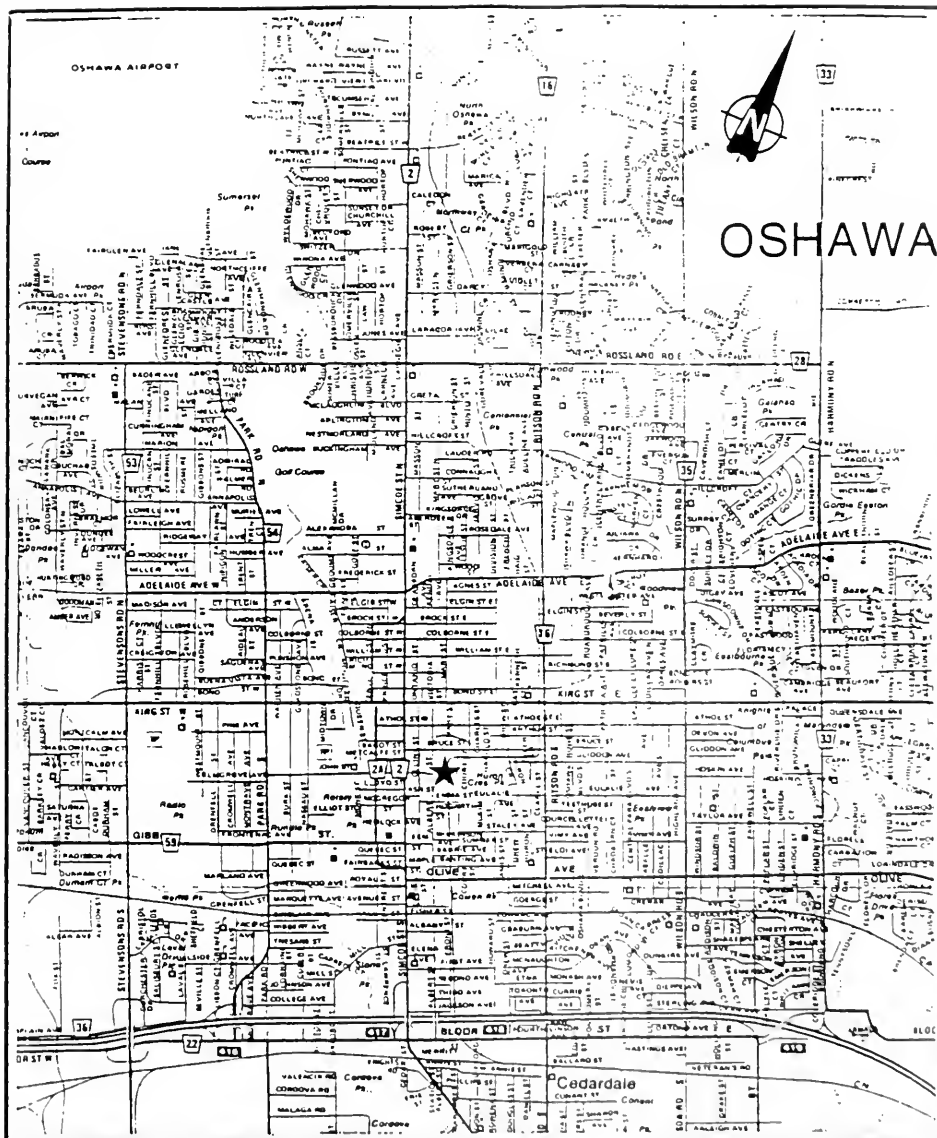
Use Probably not used due to surface water supply

Proximity of Existing Wells None reported in study area

Site Investigations None reported

6. Comments/Remarks: Second site in Oshawa located at Bond and Centre Streets, Air Monitoring conducted by Consumers Gas within their buildings at site, showed less than detection limit levels of total hydrocarbon and aromatic vapours.

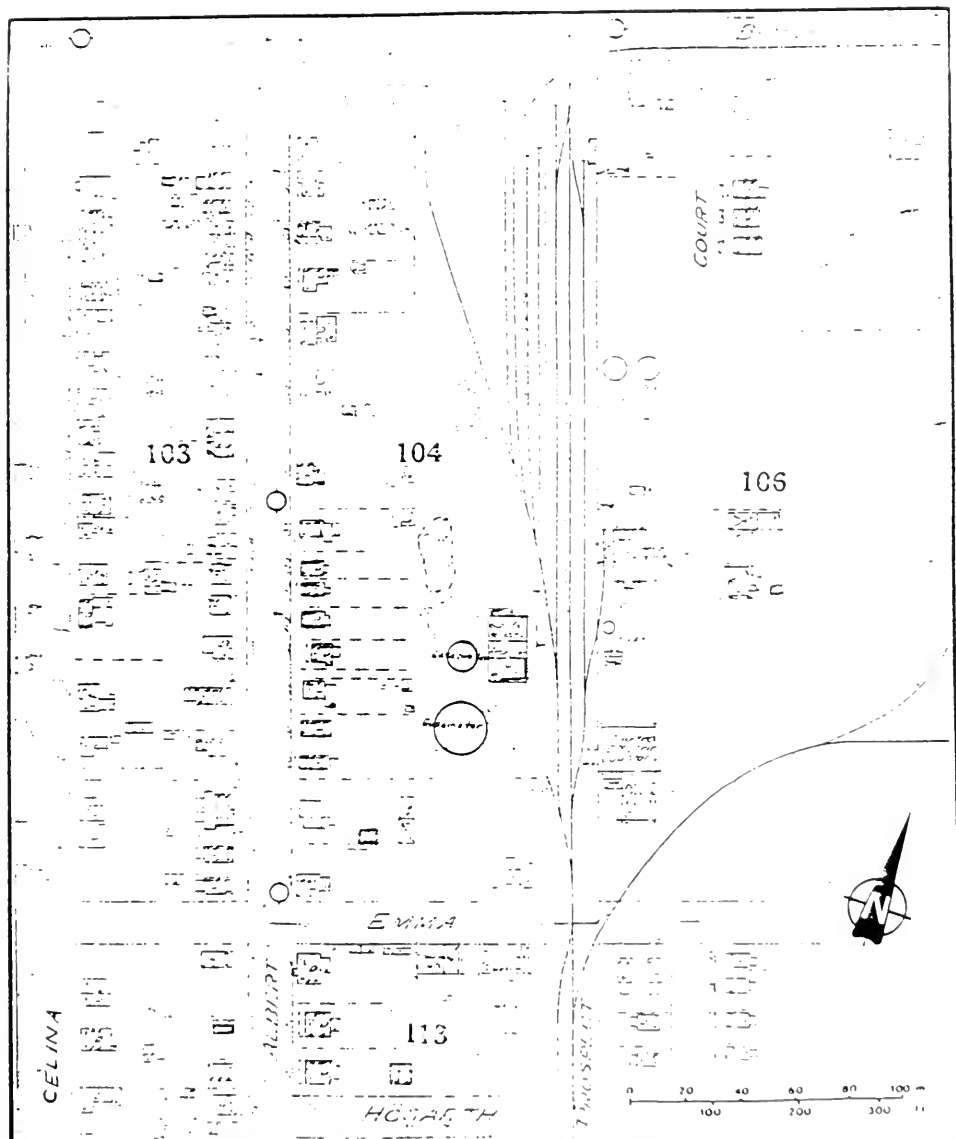
7. Off-Site Disposal Areas: No information on off-site disposal areas. Some material is believed to still be on-site.



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City of Oshawa, showing location of
former gas works (Emma Street)

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1921 Plan of Oshawa Gas Works, (Source:
Fire insurance plan, Public Archives
Canada, NMC-9603,9/16)

INTERA Technologies

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Ottawa Street Address SW corner York and King Edward
MOE Region Southeastern
MOE District Ottawa NTS Map Sheet 31 G/5

Historical Maps Available: 1878 Fire insurance plan (Public Archives Canada, NMC 10731, 18/49); 1888 Fire insurance plan (Public Archives Canada, NMC 11921, 18/188) 1912 Fire insurance plan (Public Archives Canada, NMC 9882, 18/92); 1922 Fire insurance plan (Public Archives Canada, NMC 10838, 18/93)

2. Site Identification:

Name Ottawa, King Edward Gas Works
Type of Facility Retort Coal Gasification
Operator(s) and Period(s) of Operation Bytown Consumers Gas Co. (1854-1865)
Ottawa Gas Co. (1865-1915)

3. Site Characteristics:

Size (when operated) Medium 1.1 hectare
Present Land Use Public institutional
Planned Land Use As is
Present Occupant(s) Public Works Canada, Federal Government Office Building
and parking lot
Present Land Use Adjoining Properties N-residences, commercial, E-child care
centre, S-parking lot, W-parking lot, residences
Underground Utilities Concrete and brick sewers, watermain, gas main and tele-
phone lines along York and King Edward Sts; combined sewer along George St; storm
and sanitary sewers along Cumberland St.
Soil Conditions Fill (0-3 m) overlying grey silt and clay (2-6 m) overlying till

Site Access Uncontrolled access

4. **Evidence of Buried Wastes:**

Operating Period 1854-1915? About 61 years

Excavation History Excavation for Bank of Canada Building (1940's) Redevelopment,
Extension by Department of Public Works Canada (1986)

Visible Wastes Black tar observed during excavation of parts of basement; "black
odourous substance" reported from 1986 soil borings on site; pure tar in basement
sumps at federal building

Odour: Minor odours observed in basement during excavation; Air monitoring studies
Health & Welfare Canada within Federal Bldg and Child Care Centre results negative.

Water Pollution Oily contaminated water observed in basement during excavation. PAH
in groundwater and sump water samples.

5. **Resource Characteristics:**

Surface Water Ottawa River and Rideau River

Proximity North > 1 km

Use Recreation

Groundwater, Proximity Unknown

Use None reported

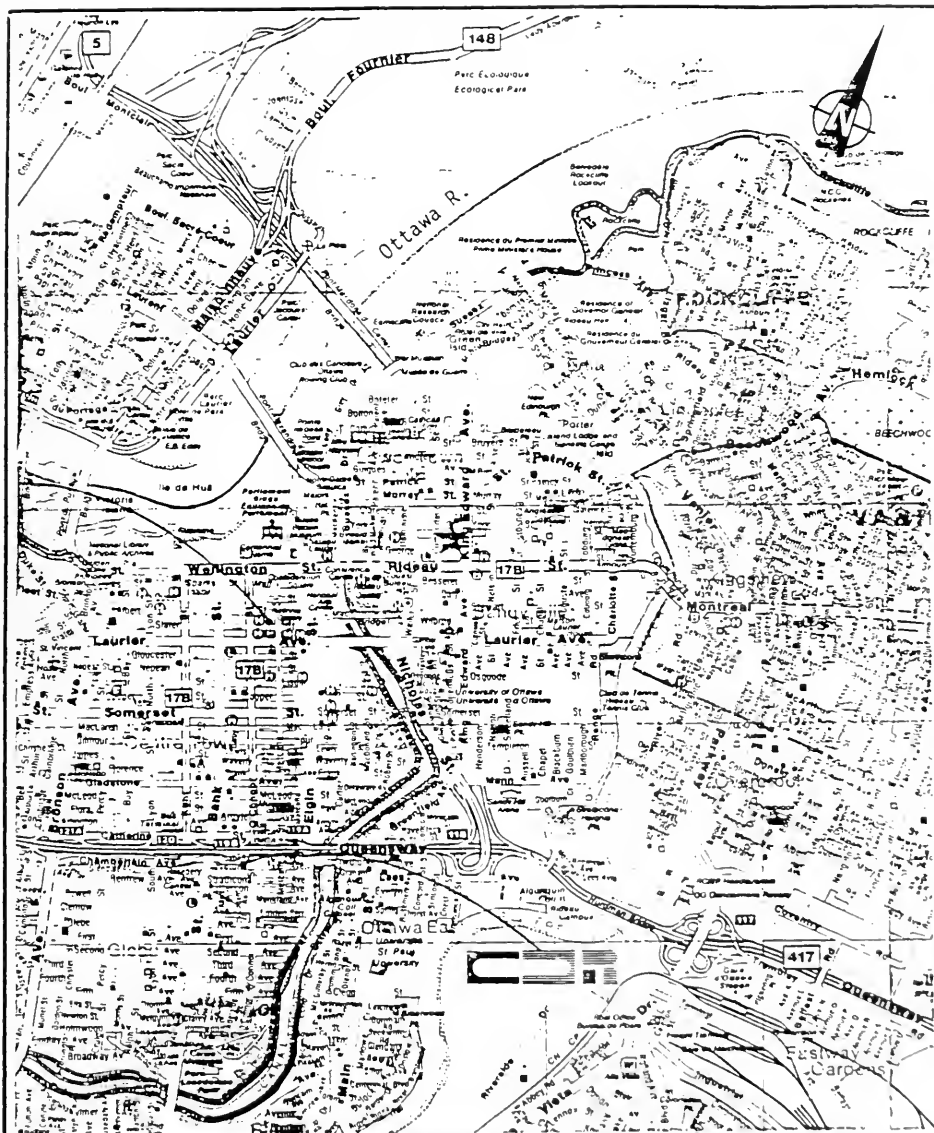
Proximity of Existing Wells None reported

Site Investigations 1985 soil borings for Public Works Redevelopment & Extension
1986 soil borings for tar contamination assessment

6. **Comments/Remarks:** Site assessment for tar contamination underway. On site
augering program complete. "Black odourous substance" noted in majority of bore-
holes drilled. Samples of soil and water showed PAH characteristic of coal tar,
groundwater samples and sump water samples with PAH, pure tar in basement sump
of federal building

7. **Off-Site Disposal Areas:**

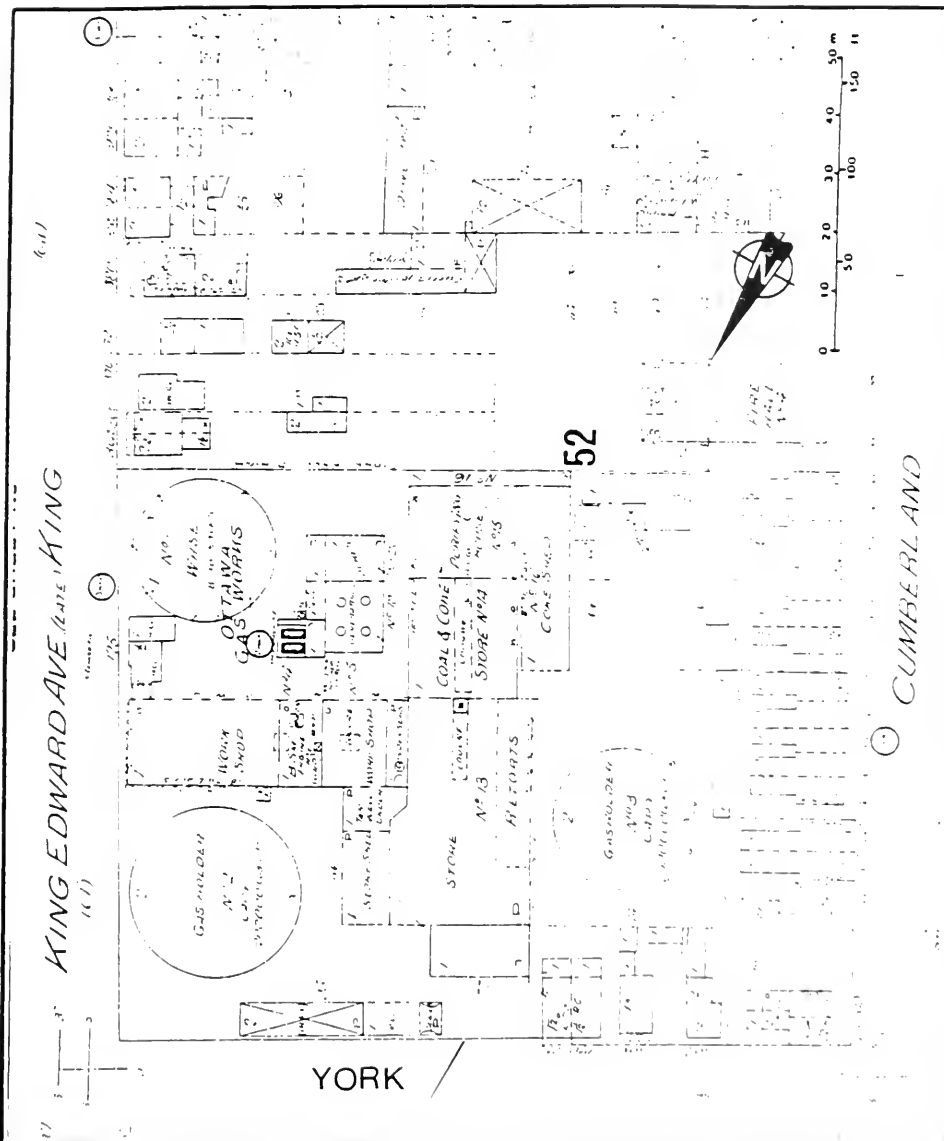
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City of Ottawa, showing location of former gas works (King Edward Ave.)

INTERA Technologies



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1912 Plan of Ottawa (King Edward Ave.) Gas Works, (Source: Fire insurance plan, Public Archives Canada, NMC-9882,18/92)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Ottawa Street Address 175 Lees Avenue
MOE Region Southeastern
MOE District Ottawa NTS Map Sheet 31 G/5
Historical Maps Available See attached sheet

2. Site Identification:

Name Ottawa Lees Avenue Gas Works
Type of Facility Retort coal gasification, later carburetted water gas
Operator(s) and Period(s) of Operation Ottawa Gas Co. (1920? - 1939)
Ottawa Heat Light and Power (1939-1950), Interprovincial Utilities (1950-1956),
Consumers Gas Co. (1957)

3. Site Characteristics:

Size (when operated) Large 3 hectare
Present Land Use Bus transitway station (public use), high-rise apartment building (residential), gas metering station
Planned Land Use High-rise development planned for 169 Lees Avenue
Present Occupant(s) RMOC - Lees Avenue Transitway Station, R. Vocisano: in trust, Consumers Gas Co.
Present Land Use Adjoining Properties N-Highway 417, E-Algonquin College, S-High-rise apartments, Dept. of National Defense Armouries, W-Highway 417 on-off ramps
Underground Utilities Storm and sanitary sewers, watermain, telephone and gas mains along Lees Avenue; Storm sewer network for transitway station, storm sewer from transitway pumping station to Rideau River
Soil Conditions Fill (0-8 m), alluvium (3-8 m), till overlying shale bedrock
Site Access Uncontrolled access

Historical Maps Available

- 1920 - Ottawa Gas Co. plan of works (Ottawa Gas)
- 1922 - fire insurance plan (Public Archives Canada, NMC 10837, key and sheet 259/263)
- 1940 - Ottawa Gas Company, Gas Works Lees Avenue, General plant layout (Ottawa Gas)
- 1956 - fire insurance plan (Public Archives Canada, NMC, Ottawa Vol. 2, 234-4)

4. **Evidence of Buried Wastes:**

Operating Period 1920? - 1957, about 37 years

Excavation History Queensway Highway Construction (1965); Bus transitway construction (1981-83), 169 Lees Avenue apartments (1985); installation of tar collector system on transitway property (1986)

Visible Wastes Observed during transitway construction, within transitway pumping station, during excavation for site remediation

Odour Observed in transitway station, transitway property, on Rideau River, on 169 Lees Avenue property

Water Pollution Estimated 40 m³ tar on bottom of Rideau River, oil slick on Rideau River observed in April - May 1986

5. **Resource Characteristics:**

Surface Water Rideau River

Proximity 150 m southeast

Use Recreational

Groundwater, Proximity 2-7 m below ground surface

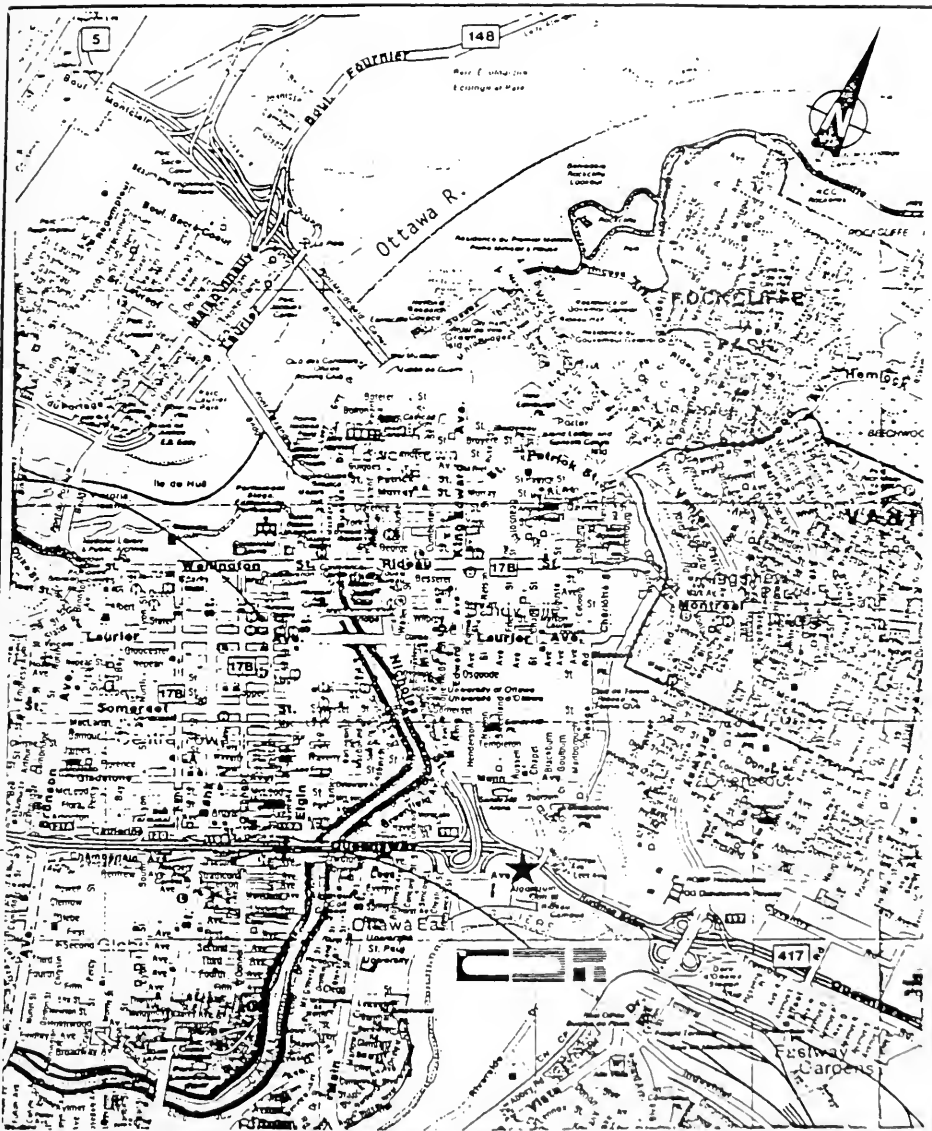
Use None reported

Proximity of Existing Wells None reported in impacted area

Site Investigations Site investigations undertaken and ongoing on behalf of RMOC and MOE

6. **Comments/Remarks:** Clean-up of transitway property and Rideau River ongoing, investigations continuing

7. **Off-Site Disposal Areas:** Ash and cinder likely disposed on former dump site that is now Algonquin College, and south of Lees Avenue at 180 and 190 Lees Avenue, some tar and spent oxide wastes likely disposed south of Lees Avenue



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City of Ottawa, showing location of
former gas works (Lees Ave)

INTERA Technologies

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Owen Sound Street Address 1141-1145 First Avenue East
rear abuts 2nd Avenue East
MOE Region Southwestern
MOE District Owen Sound NTS Map Sheet 41 A/10

Historical Maps Available 1923 - fire insurance plan (Public Archives Canada, NMC 9609, Sheet 20); 1931 - revision of 1923 fire insurance plan (Public Archives Canada, NMC 9610, Sheet 20); 1946 - Revision of 1923 (Public Archives Canada, NMC 9611, Sheet 20)

2. Site Identification:

Name Owen Sound Gas Works
Type of Facility Retort Coal Gasification, later coke oven gas
Operator(s) and Period(s) of Operation Owen Sound Gas Light and Fuel Co. (1888-1892), Owen Sound Gas Light Co. (1892), Owen Sound Gas Department (1912-15), Public Utilities Commission of Owen Sound (1915-1947)

3. Site Characteristics:

Size (when operated) Medium, 0.5 hectares
Present Land Use Commercial, retail
Planned Land Use As is
Present Occupant(s) Brewers Retail Store & Liquor Control Board of Ontario
Present Land Use Adjoining Properties N-industrial, E-residential, S-commercial, W-water front
Underground Utilities Storm and sanitary sewers along First and Second Avenue East, storm sewer into Brewers Retail from First Avenue East and watermain along First Avenue East
Soil Conditions Fill assumed
Site Access Uncontrolled

4. **Evidence of Buried Wastes:**

Operating Period 1888-1947 (59 years)

Excavation History Minor construction of buildings (1962)

Visible Wastes None reported or observed but a former operator reported that tar was allowed to overflow onto the ground if no tankers were there to collect it

Odour None reported or observed

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Sydenham River (Georgian Bay)

Proximity 50 m east

Use Industrial, recreational, water supply

Groundwater, Proximity Unknown

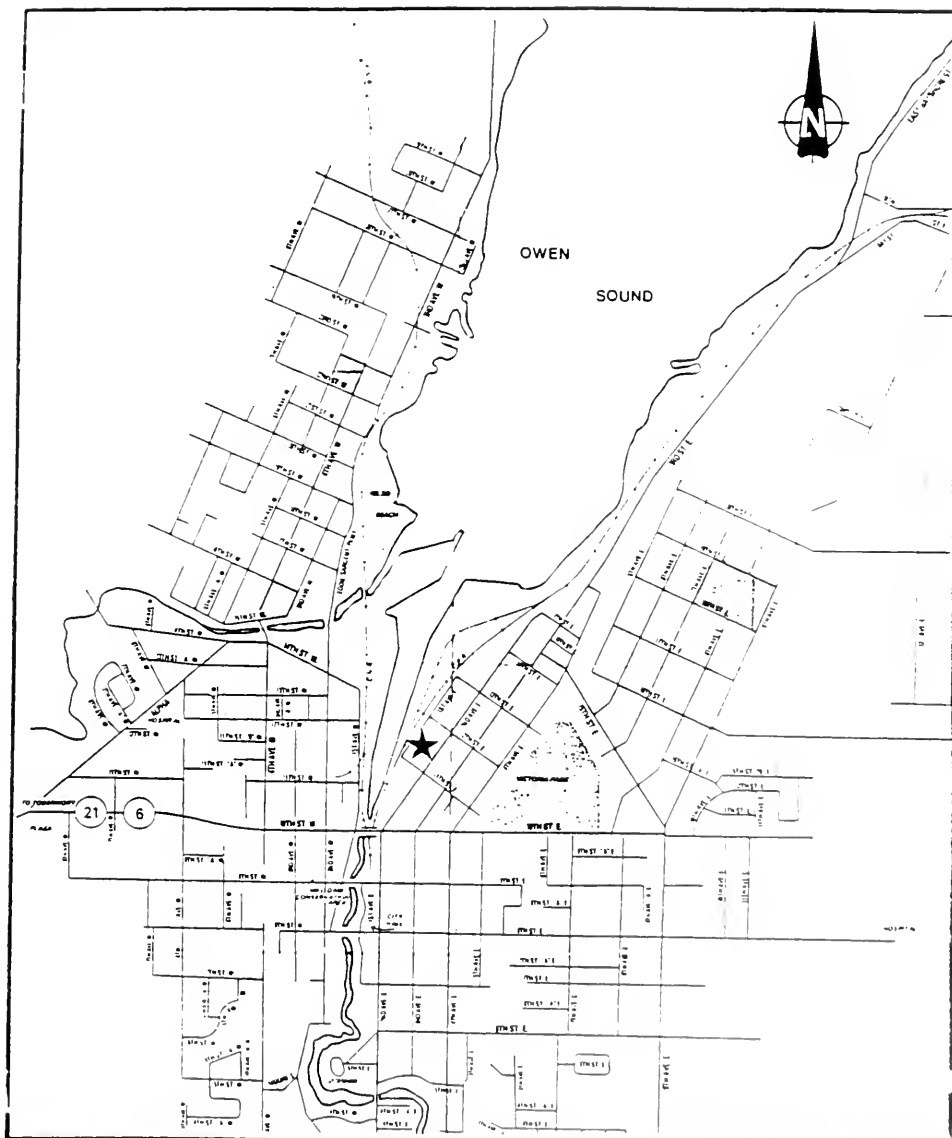
Use None reported in area

Proximity of Existing Wells None reported in area

Site Investigations None reported

6. **Comments/Remarks:** 1923 map shows tar tank under First Avenue East

7. **Off-Site Disposal Areas:** No known off-site disposal areas for waste or excavated material



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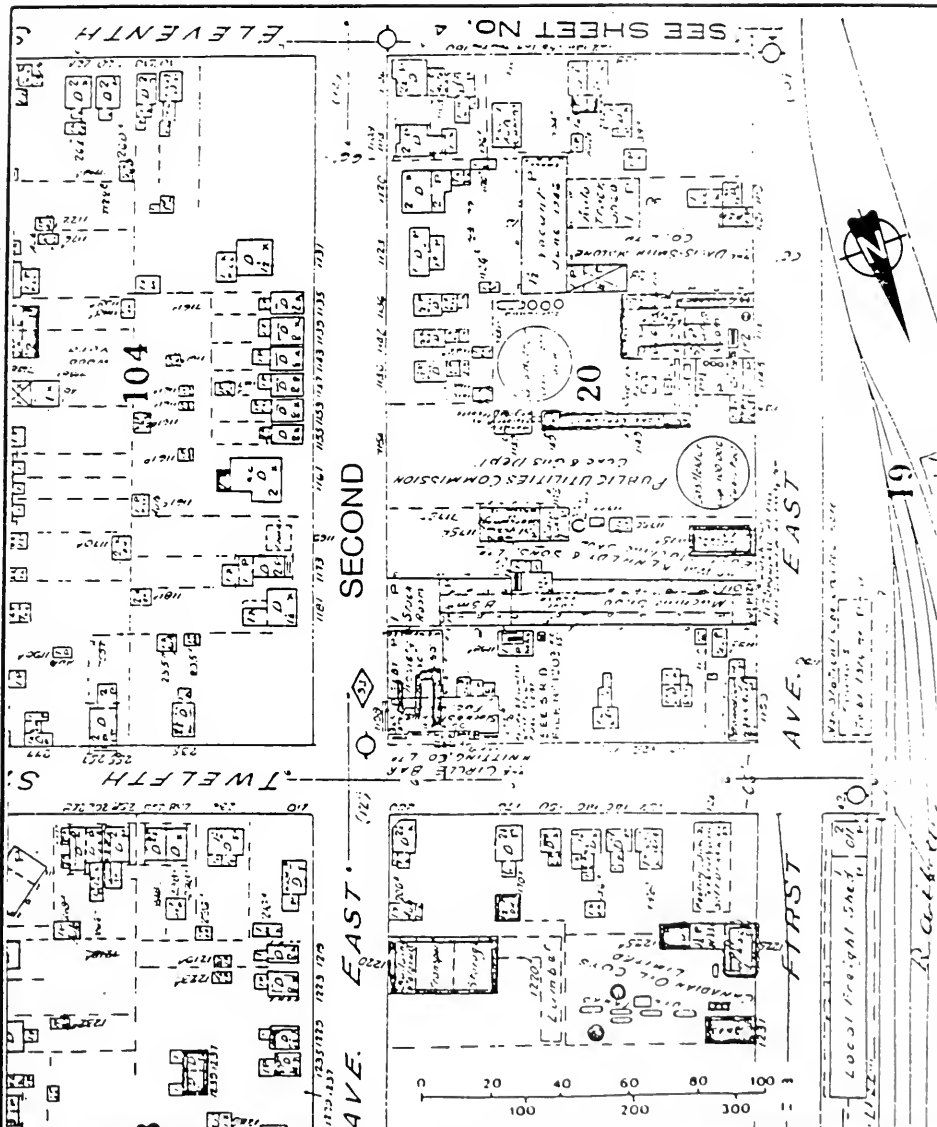
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City of Owen Sound, showing location of
former gas works.

INTERA Technologies



1946 Plan of Owen Sound Gas Works, (Source: Fire insurance plan, Public Archives Canada, NMC-9611, sheet 20)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

Site Location:

City Peterborough Street Address N. side Simcoe Street between Queen Street and Railway line adjacent to the Otonabee River

MOE Region Central

MOE District Peterborough NTS Map Sheet 31 D/8

Historical Maps Available See attached sheet

Site Identification:

Name Peterborough Gas Works

Type of Facility Retort Coal Gasification, later Carburetted Water Gas and Propane Gas ?

Operator(s) and Period(s) of Operation Peterborough Gas Co. (1869-1890), Peterborough Light and Power Co. (1890-1916), Hydro Electric Power Commission of Ontario (1916-1929), Peterborough Public Utilities Commission (1929-1950s)

Site Characteristics:

Size (when operated) Large 1.1 hectare

Present Land Use Public use, institutional, commercial

Planned Land Use As is

Present Occupant(s) City parking lot, Provincial Courts, Electric Transformer Station, Natural Gas Metering Station, Cycle Shop

Present Land Use Adjoining Properties N-Commerical, E-Commercial (Quaker Oats), S-parkland, commerical (Peterborough Square), W-residences, commercial

Underground Utilities Storm and sanitary sewers, watermain below Simcoe Street, storm sewers, catch basins in City parking lot

Soil Conditions Fill, silt, sand, gravel over fill

Site Access Uncontrolled access

4. Evidence of Buried Wastes:

Operating Period 1881-1890, 9 years
Excavation History None reported, original gas plant; buildings part of basement of Lindsay Hydro
Visible Wastes None reported or observed
Odour None reported or observed
Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Scuogog River
Proximity 30 m east
Use Recreational, water supply upstream
Groundwater, Proximity Unknown
Use None reported
Proximity of Existing Wells None reported
Site Investigations Unknown

6. Comments/Remarks: Although no site plans of gas works are available, the outline of the gas holding tank is visible on the 1911 paste up of the 1898 map; the former gas holding tank is located below the floor of the Lindsay Hydro Garage

7. Off-Site Disposal Areas: Unknown

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Lindsay Street Address 66 William Street

MOE Region Central

MOE District Peterborough NTS Map Sheet 30 D/7

Historical Maps Available 1911 Revision of 1898 fire insurance plan (Public Archives Canada, NMC 9522 4/18; 1928 fire insurance plan (Archives of Ontario), Sheet 4; 1947 fire insurance plan (Public Archives Canada, NMC 9521, 4/25)

2. Site Identification:

Name Lindsay Gas Works

Type of Facility Coal Gasification

Operator(s) and Period(s) of Operation Consumers Gas Company of Lindsay

(1881-1890)

3. Site Characteristics:

Size (when operated) Small, 0.2 hectare

Present Land Use Lindsay Hydro offices, garage and parking lot

Planned Land Use As is

Present Occupant(s) The Hydro Electric Commission of the Town of Lindsay

Present Land Use Adjoining Properties N-commercial, E-parkland, Scugog River.

S-residences, W-residences, food store

Underground Utilities Storm and sanitary sewers, pressurized sanitary sewer along William Street

Soil Conditions Unknown, fill assumed in the near surface

Site Access Controlled

Historical Maps Available

- 1875 - Romaine Map of Peterborough (Public Archives Canada, NMC 4306 5/9)
- 1875 - Bird's Eye (Public Archives Canada, NMC 43197), blow up
- 1899 - Plan of the Peterborough Gas Company's Property (Peterborough Utilities Comm.)
- 1900 - Bird's Eye (Public Archives Canada, NMC 4984)
- 1915 - Fire insurance plan (Regional Collection, University of Western Ontario)
- 1944 - Peterborough gas plant plan, showing Oil Supply and Drainage (Peterborough Utilities Commission)
- 1946 - Plan showing property at Gas Works in Northwest corner, requested by Boorman's Beverages (Peterborough Utilities Commission)
- 1948 - Revision of 1929 fire insurance plan (Public Archives Canada, NMC 9627, 7/34)
- 1968 - Fire insurance plan (Public Archives Canada, sheet 73)

4. **Evidence of Buried Wastes:**

Operating Period 1869-late 1950's approx. 80 years

Excavation History Transformer station, Peterborough Square, Simcoe Street,

Reconstruction all with no wastes reported. Court House construction 1982-83
tars encountered, 1986 watermain installation, tar encountered at bank of Otonabee
River

Visible Wastes Tars reported during 1973 and 1982 soil borings at site of parking
lot and court house, tar in excavation for court house (1982), tar in bank of
Otonabee River (1986), tar observed base of court house stair well (1987)

Odour Tar odour in storm sewer located in City parking lot

Water Pollution Tars observed in Otonabee River, February 1986 during excavation
for installation of watermain, oil slick on river. Divers assisting watermain
installation, report swollen lips and skin rashes

5. **Resource Characteristics:**

Surface Water Otonabee River

Proximity 45 m east

Use Recreational

Groundwater, Proximity Water table within fill at 2 - 3 m depth

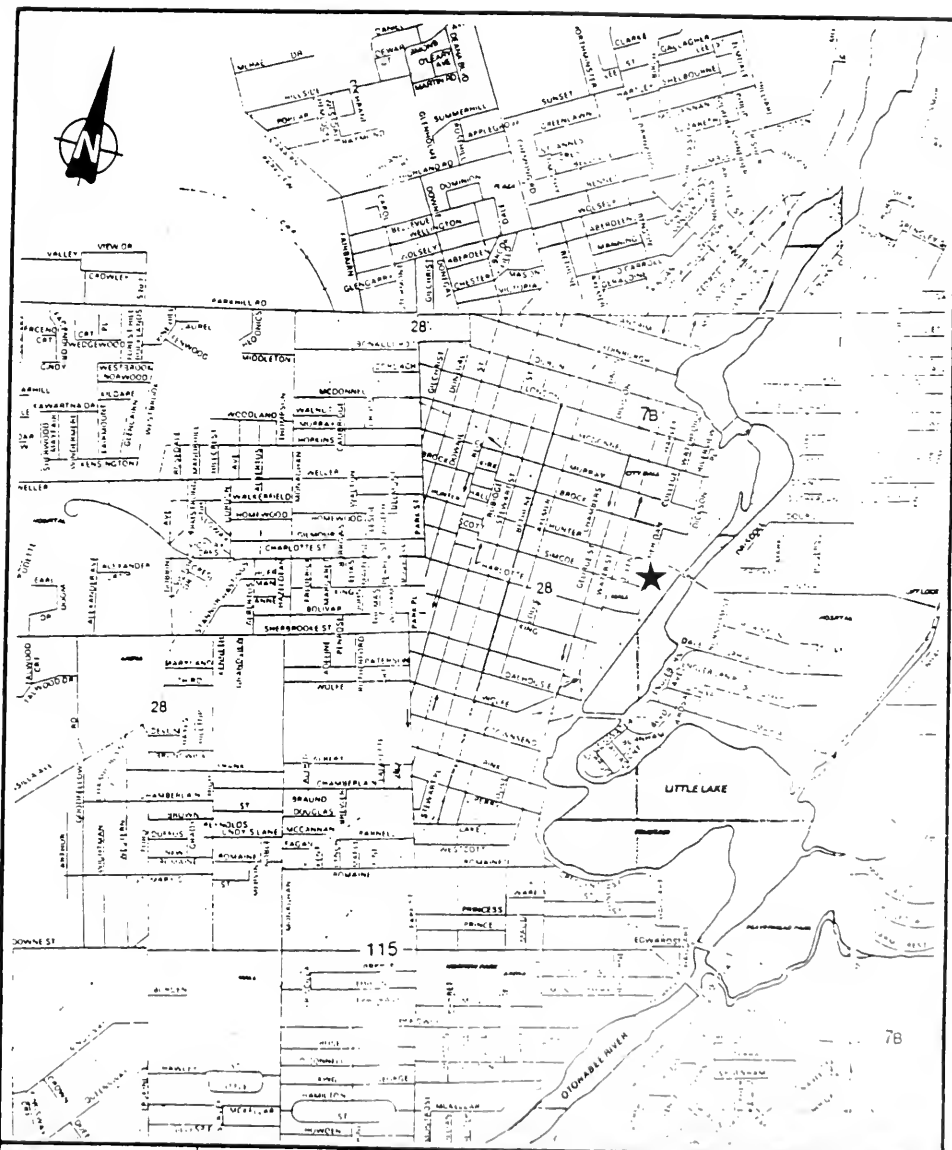
Use None reported in impact area; old well on Quaker Oats Property
currently not in use

Proximity of Existing Wells None reported

Site Investigations 1973 soil borings for proposed gas works parking area;
1982 soil borings for proposed provincial court building

6. **Comments/Remarks:** Significant slope of land from northwest to southeast across
former gas works site to Otonabee River is likely waste migration pathway;
disposition of wastes removed during Court House construction unknown. Sample of t
showed PAH characteristics of coal tar

7. **Off-Site Disposal Areas:** Likely 150 m south of plant at foot of Charlotte Steet
adjacent to Otonabee River



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City of Peterborough, showing location of former gas works.

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WEST



35

QUEEN

SIMCOE

OTONABEE R.

0 10 20 30 40 50 m
50 100 150 ft

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1948 Plan of Peterborough Gas Works,
(Source: Fire insurance plan, Public
Archives Canada, NMC-9627,7/34)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Port Hope Street Address 70-80 John Street, west side of
John Street between Park and Alexander Streets
MOE Region Central
MOE District Peterborough NTS Map Sheet 30 M/16
Historical Maps Available 1874 Bird's Eye View (Public Archives Canada, NMC 4986)
1904 Revision of 1901 fire insurance plan (Public Archives Canada, NMC 9793)
4/18 site, 1/18 key, 1955 fire insurance plan (Public Archives Canada), Sheet 22

2. Site Identification:

Name Port Hope Gas Works
Type of Facility Retort Coal Gasification
Operator(s) and Period(s) of Operation Port Hope Gas Light Co. (1859-1892):
Port Hope Gas and Light Co. (1892-1916); Hydro Electric Power Commission of
Ontario (1917-1938)

3. Site Characteristics:

Size (when operated) Small 0.2 hectare
Present Land Use Vacant lot, zoned residential
Planned Land Use As is
Present Occupant(s) Vacant - Corporation of the Town of Port Hope
Present Land Use Adjoining Properties N-vacant - planned development, residential
E-Furniture Store, S-Alexander Street, W-residential
Underground Utilities Storm and sanitary sewers, watermain and gas main along
John Street, Watermain and sanitary sewer along Alexander Street
Soil Conditions Unknown, fill assumed in the near surface
Site Access Uncontrolled

4. **Evidence of Buried Wastes:**

Operating Period 1859-1938, 79 years

Excavation History None reported, some foundations and walls visible (possibly original gas plant buildings)

Visible Wastes None reported or observed

Odour Petroleum/coal tar-like odours from storm sewer manhole on John Street near Alexander Street

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Lake Ontario

Proximity 140 m southeast

Use Harbour, recreational, industrial, water supply 700 m south

Groundwater, Proximity High water table, groundwater discharges and springs in area of site

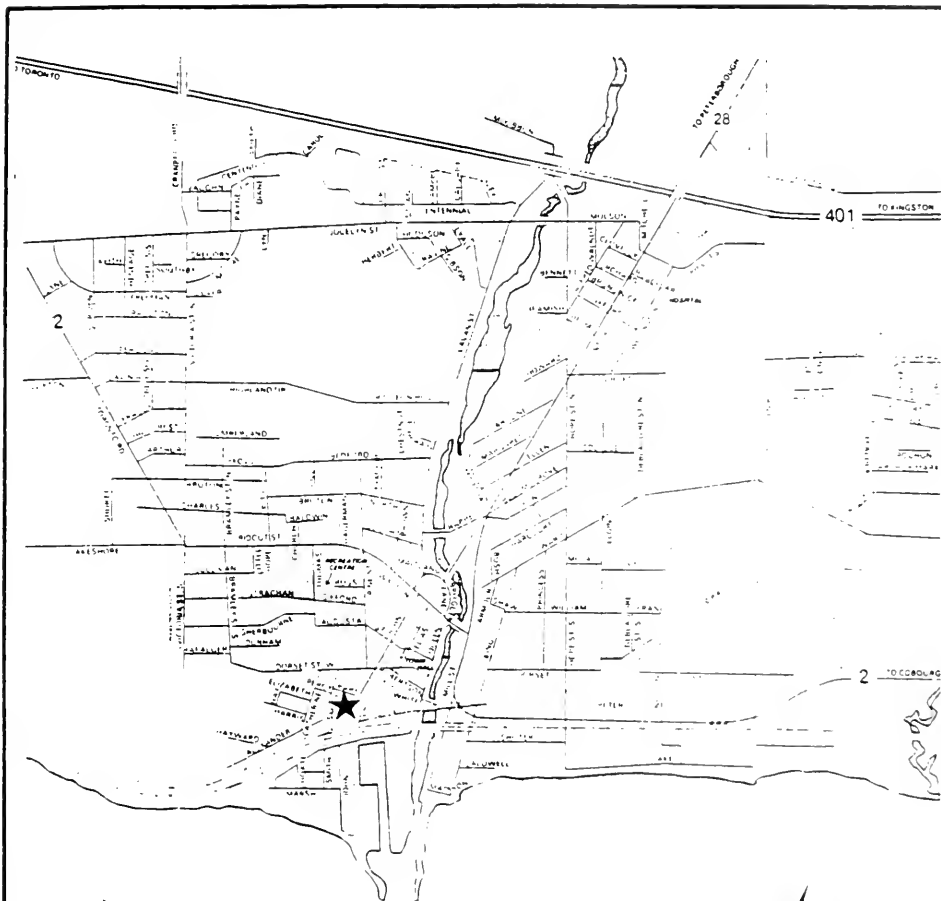
Use None reported

Proximity of Existing Wells No wells within impacted area

Site Investigations Soil surveys nearby Eldorado Ltd. facility

6. **Comments/Remarks:** Site inspection during spring when groundwater discharge is greatest is recommended

7. **Off-Site Disposal Areas:** Unknown



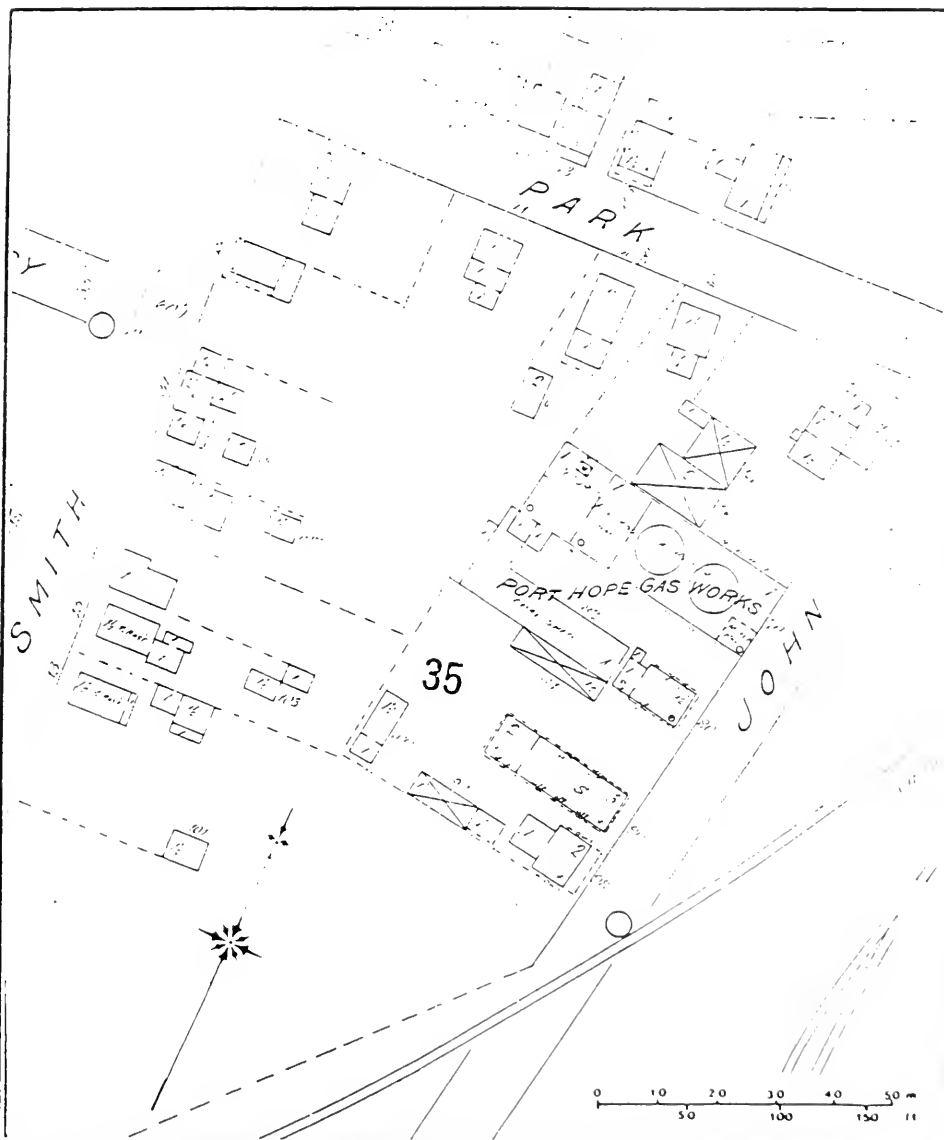
LAKE ONTARIO



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Town of Port Hope, showing location of former gas works.

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1904 Plan of Port Hope Gas Works, (Source:
Fire insurance plan, Public Archives Canada,
NMC-9793, 4/18)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Port Stanley Street Address Carlow Road, bounded by Lake
Road, Marr Road, Carlow Road, and George Street
MOE Region Southwestern
MOE District London NTS Map Sheet 40 I/11 1976, 1:50,000
Historical Maps Available No historical maps available

2. Site Identification:

Name Port Stanley Oil Gas Works
Type of Facility Oil gasification
Operator(s) and Period(s) of Operation Southern Ontario Gas (1920-1930?),
Dominion Gas Company (1930-1957?), City Service Refining (1957-1958?), Imperial
Fuels (1958-?)

3. Site Characteristics:

Size (when operated) Approximately 2 hectares
Present Land Use Industrial (fertilizer) (Shamrock Chemical)
Planned Land Use Industrial (proposed oil refinery)
Present Occupant(s) Shamrock Chemicals Ltd. and Ultramar Canada Ltd.

Present Land Use Adjoining Properties W&S-residential, N-vacant, E-Kettle Creek
(recreational)

Underground Utilities George Street Drain runs through site

Soil Conditions Gas plant fill and debris

Site Access Uncontrolled

4. Evidence of Buried Wastes:

Operating Period 1945-1958 (very questionable)

Excavation History George Street Drain - waste found in drain

Visible Wastes Coal tar deposits found on Shamrock Chemicals and Ultramar lands
(under MOE clean-up)

Odour Distinct odours on site

Water Pollution Seepage into Kettle Creek through George Street Municipal drain
was detected (under clean-up)

5. Resource Characteristics:

Surface Water Lake Erie, Kettle Creek

Proximity 0.3 km south, 60 m east, respectively

Use Recreation, industrial

Groundwater, Proximity Lake Erie

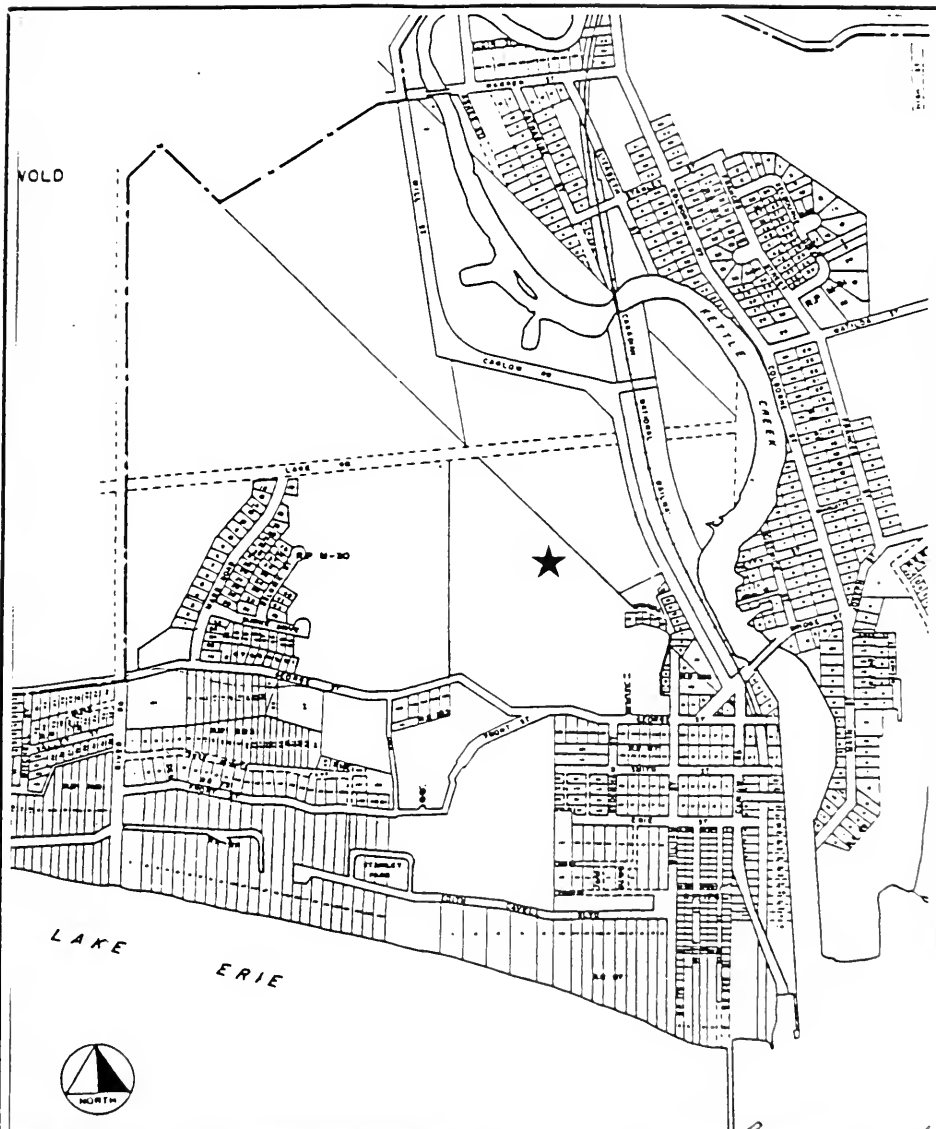
Use Water supply

Proximity of Existing Wells Unknown

Site Investigations Consultant conducting study for Shamrock Chemicals several
wells on-site. Consultant conducting study for Ultramar

6. Comments/Remarks: Wastes from old gas plant were buried in pits on-site. Wastes
disposed to the west of site - tar pits speculative

7. Off-Site Disposal Areas: Visible wastes, odours now on-site. Work and
clean-up ongoing.



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Village of Port Stanley, showing location of former gas works.

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City St. Catharines Street Address South of Gale Crescent; bottom of Calvin St., beside Old Welland Canal
MOE Region West Central
MOE District Welland NTS Map Sheet 30 M/3 & 6

Historical Maps Available: 1875 - bird's eye (Public Archives Canada, NMC 22769) blow up & full; 1916 - revision of 1913 fire insurance plan (Regional Collection, University of Western Ontario), key and Sheet 8; 1935 - revision of 1923 fire insurance plan (Regional Collection, University of Western Ontario), Sheet 7; 1943 - revision of 1923 fire insurance plan (Ontario Archives), Sheet 7

2. Site Identification:

Name St. Catharines Gas Works
Type of Facility Retort coal gasification
Operator(s) and Period(s) of Operation St. Catharines and Welland Canal Gas Light Co. (1853-1903), St. Catharines Gas Co. (1903-1928)

3. Site Characteristics:

Size (when operated) Large; 1.4 hectares
Present Land Use Parkland (recreational)
Planned Land Use As is
Present Occupant(s) St. Catharines Centennial Gardens - City of St. Catharines
Present Land Use Adjoining Properties N - residential; E & S - park land;
W - residential and commercial
Underground Utilities Combined sewer running south along Riordan St. and east to Old Welland Canal
Soil Conditions Unknown, fill assumed
Site Access Uncontrolled

4. Evidence of Buried Wastes:

Operating Period 1853 - 1928; about 65 years

Excavation History No excavation known

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Old Welland Canal

Proximity Borders south side of site

Use Dumping area for industrial effluents

Groundwater, Proximity Unknown

Use None

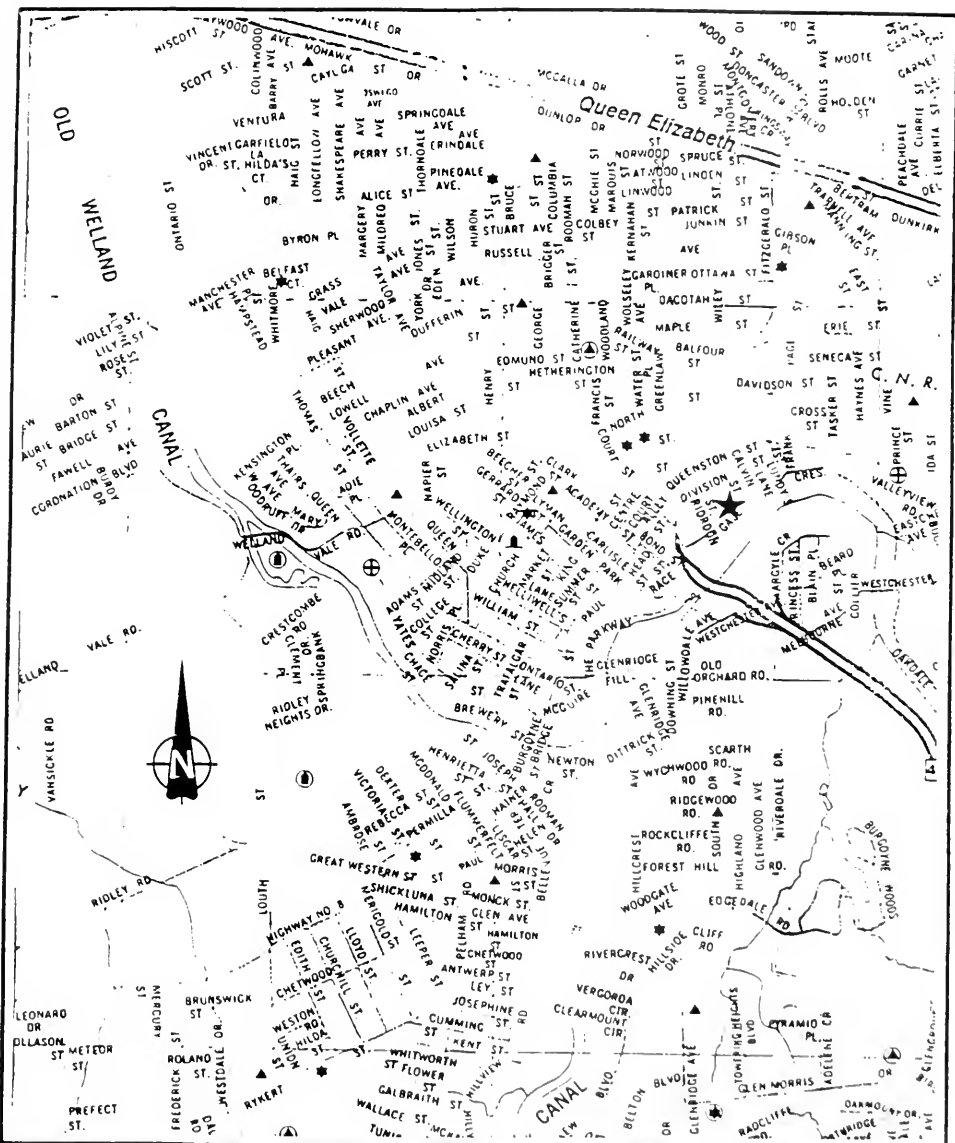
Proximity of Existing Wells No wells in impacted area

Site Investigations None

6. Comments/Remarks: Old Welland Canal was observed to have poor water quality

7. Off-Site Disposal Areas:

No known disposal areas

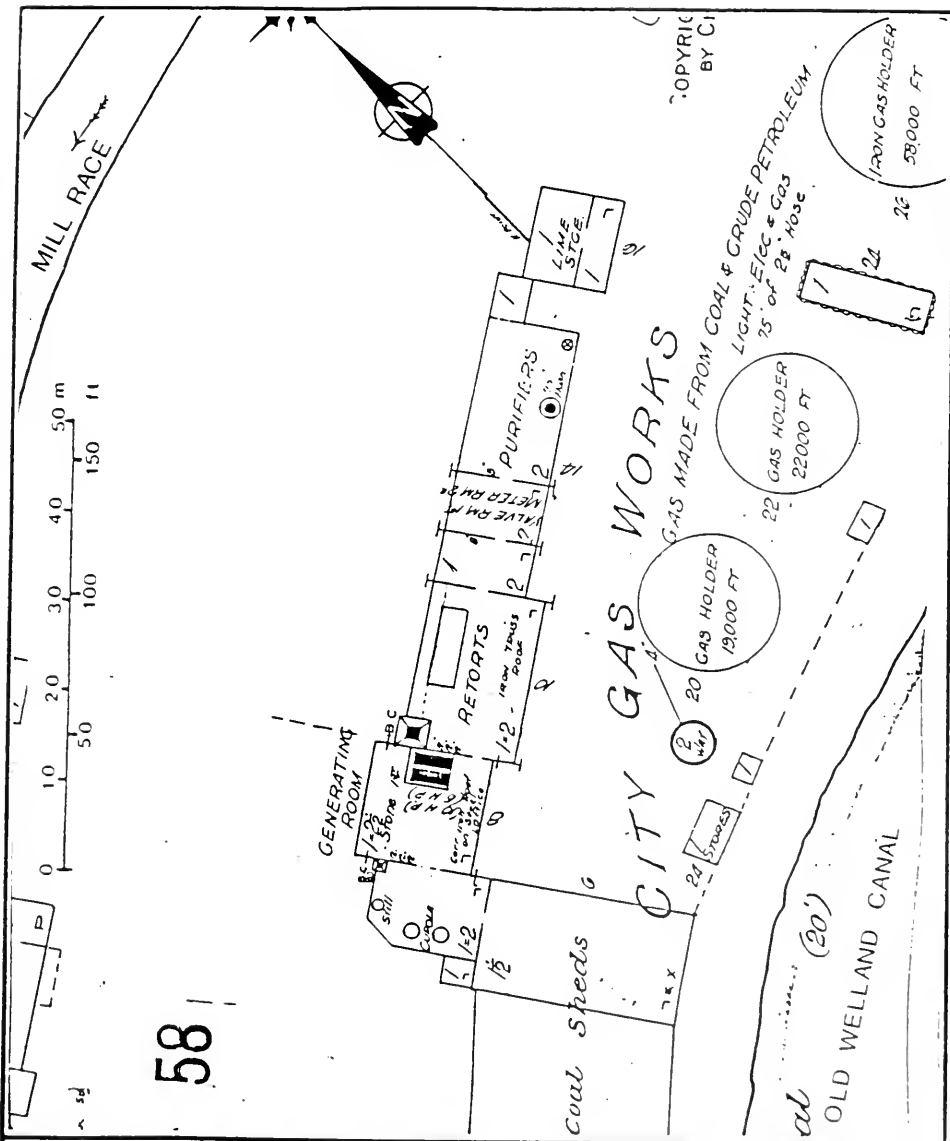


City of St. Catharines showing location of former gas works.

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1916 Plan of St. Catharines Gas Works,
 (Source" Fire insurance plan, Regional
 Collection, University of Western Ontario,
 sheet 8)

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City St. Thomas Street Address corner of Mondamin & Gas Streets,
bounded by Gas/Mondamin/Curtis/St. Catherine
Streets

MOE Region Southwestern

MOE District London NTS Map Sheet 40 I/14

Historical Maps Available 1877 H.R. Page & Co. Atlas, plan of St. Thomas (Public Archives Canada); 1929 Revision of 1922 fire insurance plan (Public Archives Canada, NMC 9682) key 1/17, site 14/17; 1943 Revision of 1922 fire insurance plan (Regional Collection, University of Western Ontario), Sheet 5

2. Site Identification:

Name St. Thomas Gas Works

Type of Facility Retort coal gasification

Operator(s) and Period(s) of Operation St. Thomas Gas Co. (1877-1901), City of
St. Thomas Gas Dept. (1901-1930), Gas Commission of St. Thomas (1930-1935)

3. Site Characteristics:

Size (when operated) Large, 1.5 hectares

Present Land Use Public Utilities Commission (public institutional).

Zevest Development Corp. (commercial)

Planned Land Use As is

Present Occupant(s) Zevest Development Corporation, Public Utilities

Commission

Present Land Use Adjoining Properties N, W, & E-residential, S-commercial

Underground Utilities Hydro and Bell lines, Sanitary and storm sewers, and
watermain along St. Catherine's Street, Gas and water lines and sanitary and storm
sewers along Mondamin Street, Sanitary sewer along Gas Street

Soil Conditions 1 to 2 m fill overlying hard silty clay till

Site Access Uncontrolled

4. Evidence of Buried Wastes:

Operating Period 1877-1935, 58 years

Excavation History Scott-Kains Jog Elimination Road and Sewer Construction (1969)

Visible Wastes PUC employees reported black tarry material in excavations for the construction of the 1800 mm dia. sewer and for the excavation work done on PUC property. "Deleterious" material removed during construction and replaced with granular fill

Odour Odourous material encountered during drilling for road and sewer site investigation

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Kettle Creek

Proximity 0.9 km west

Use Unknown

Groundwater, Proximity Ranges from 7.6 m below ground surface to 2 m below ground surface in the ravine

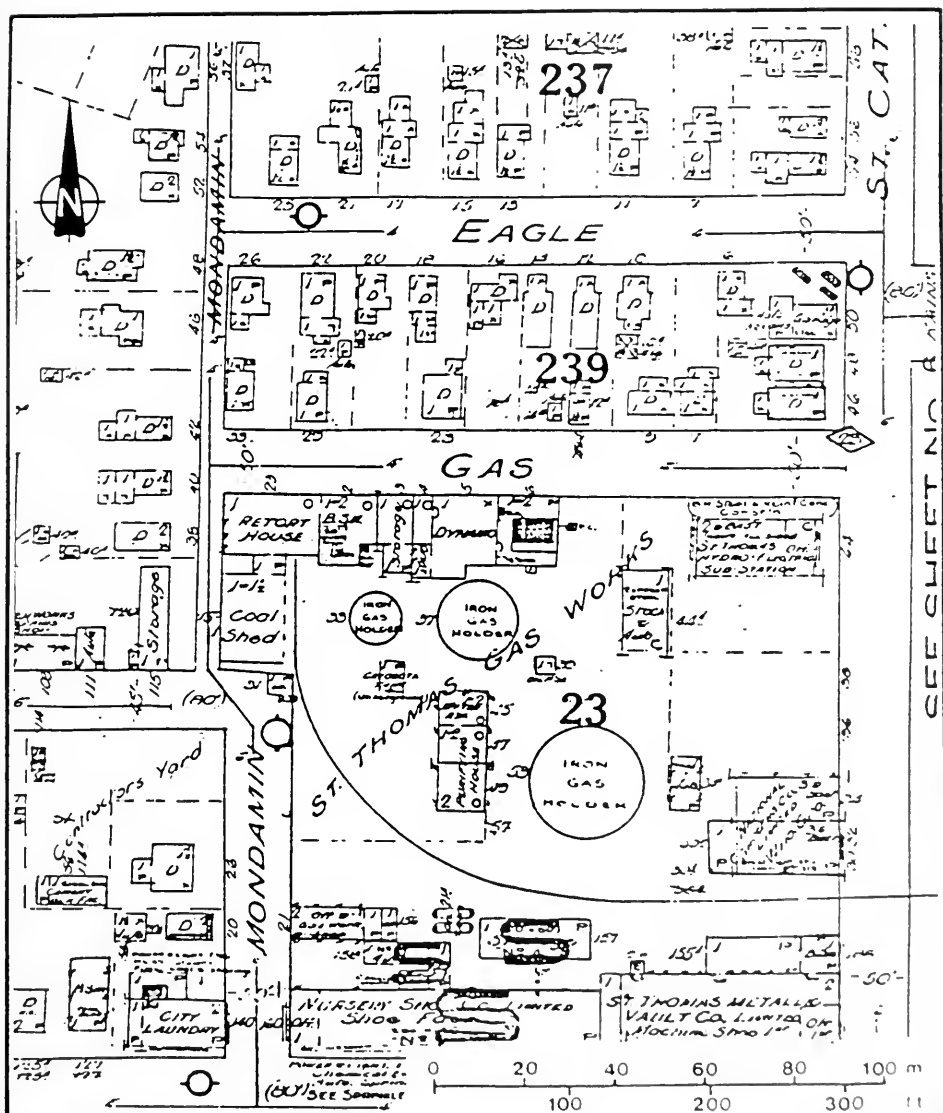
Use None (drinking water source is Lake Ontario)

Proximity of Existing Wells None

Site Investigations Road and sewer soils investigation

6. Comments/Remarks:

7. Off-Site Disposal Areas: No known off-site disposal areas. The disposal site of the material excavated during road and sewer construction is unknown.



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1929 Plan of St. Thomas Gas Works, (Source: Fire insurance plan, Public Archives Canada, NMC-9682, 14/17)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Sarnia Street Address Maxwell Street, bounded by
Maxwell, Water, and Front Streets, and Railway
tracks
MOE Region Southwestern
MOE District Sarnia NTS Map Sheet 40 J/6
Historical Maps Available See attached

2. Site Identification:

Name Sarnia Gas Works
Type of Facility Coal gasification, may have used natural gas after 1909
Operator(s) and Period(s) of Operation Sarnia Consumers Gas Company (1884-1893)
Sarnia Gas and Electric Light Company (1893-1909)

3. Site Characteristics:

Size (when operated) Medium, 0.5 hectares
Present Land Use Hydro-electric substation and storage, grocery wholesaler
(commercial)
Planned Land Use Planned sale
Present Occupant(s) Sarnia Hydro-Electric Commission and Loeb Cash and Carry

Present Land Use Adjoining Properties N&S-residential, E-retail and service
commercial, W-railway line
Underground Utilities Storm and sanitary sewer and watermain along Maxwell
Street, Water Street, and Nelson Street, sanitary sewer along Front Street
Soil Conditions 1 m of fill underlain by clay till

Site Access Substation is controlled, wholesalers is semi-controlled

4. Evidence of Buried Wastes:

Operating Period 1884-1909 or 1923, 25-39 years

Excavation History Sewer excavations adjacent to site and construction of
substation and wholesale building

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water St. Clair River

Proximity 125 m west

Use Industrial/recreational/water supply (downstream)

Groundwater, Proximity Fresh water aquifer approximately 35 m below surface

Use Water supply inland, minor industrial use

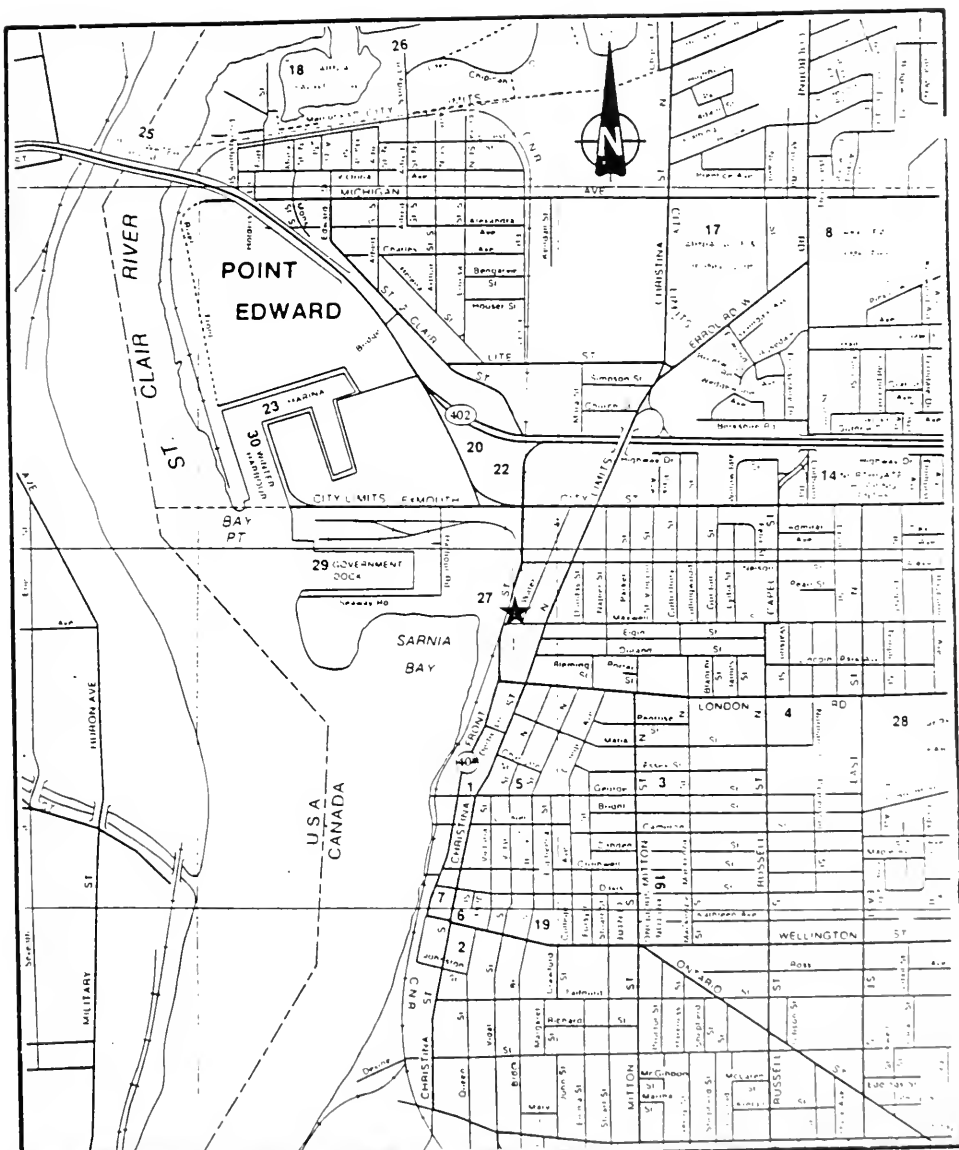
Proximity of Existing Wells Golf course well is 2 km north (used only for watering
golf course)

Site Investigations Storm and sanitary sewers, soil investigation along Water
Street

6. Comments/Remarks:

7. Off-Site Disposal Areas: No known disposal areas for plant site wastes

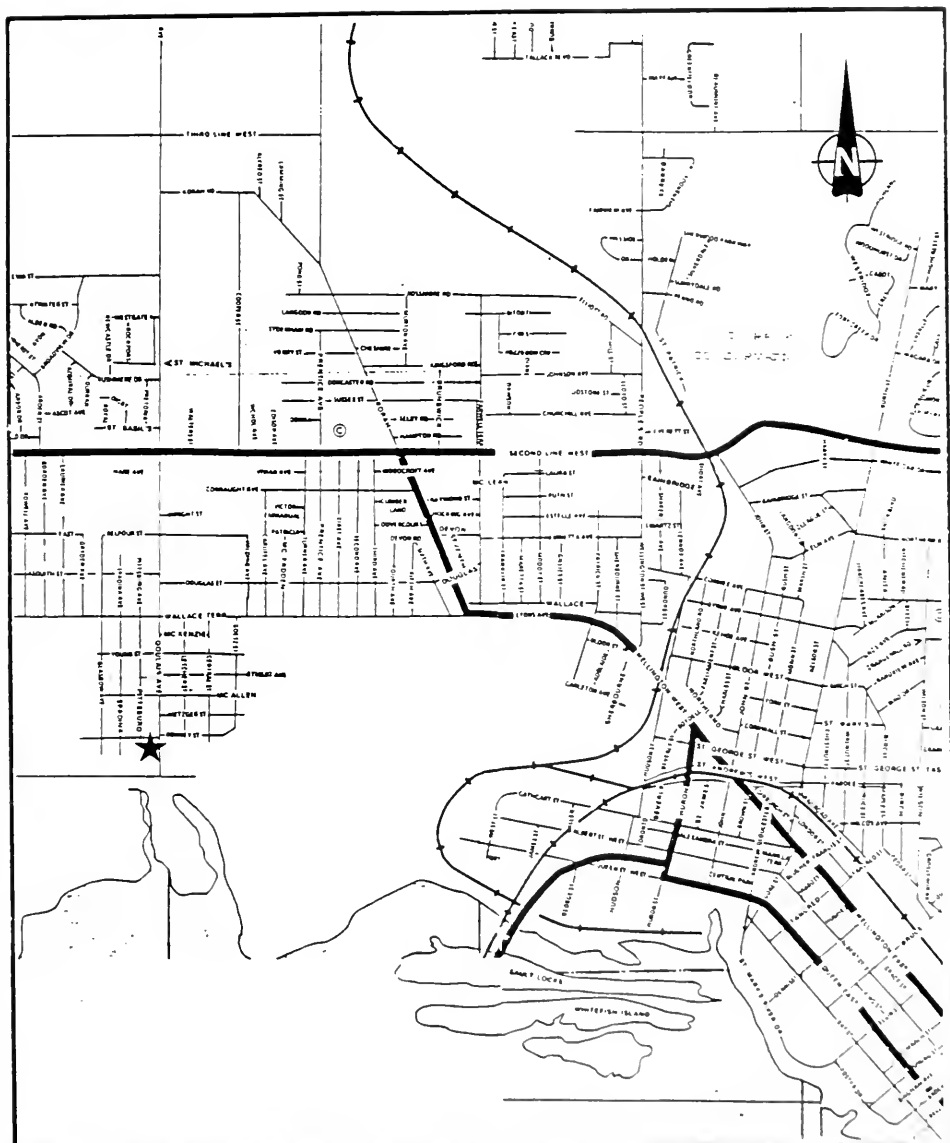
- 1893 - City map (Public Archives Canada, NMC 38538, 1/4)
- 1913 - Revision of 1903 fire insurance plan (Regional Collection, University of Western Ontario), sheet 10
- 1923 - Fire insurance plan (Archives of Ontario) sheet 4
- 1929 - Revision of 1923 fire insurance plan (Regional Collection, University of Western Ontario), sheet 4
- 1958 - Fire insurance plan (Public Archives Canada), sheet 26



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City of Sarnia, showing location of former gas works.

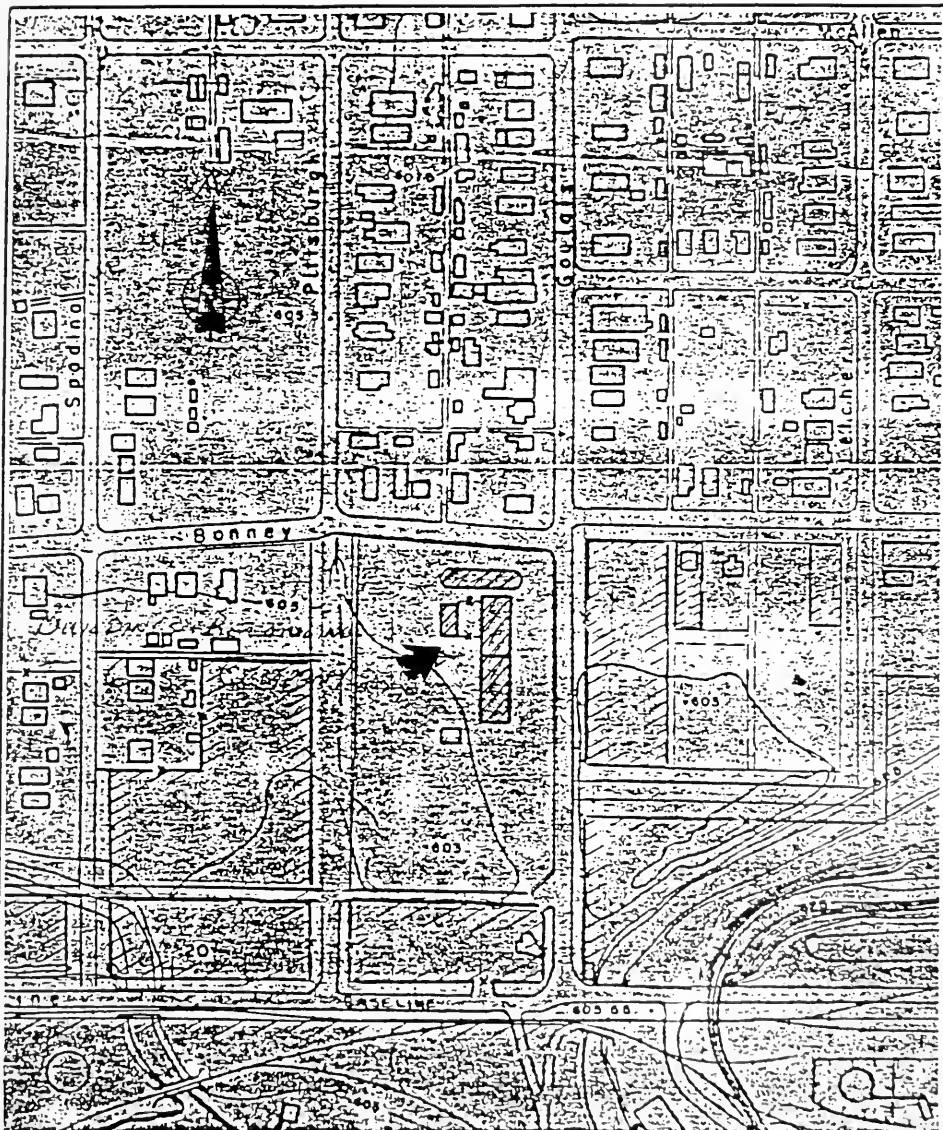
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City of Sault Ste. Marie showing
location of former gas works.

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Plan of Great Northern Gas Co. property,
(Source: Undated map provided by Algoma
Steel Co. Ltd.)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Sault Ste. Marie Street Address Goulais Avenue, bounding blocks
Bonney Street, Baseline, Pittsburg, Goulais

MOE Region Northeastern

MOE District Sault Ste. Marie NTS Map Sheet 41 K/9

Historical Maps Available Undated map provided by Algoma Steel Co. Ltd.

2. Site Identification:

Name Great Northern Gas Co. Property

Type of Facility Coal carbonization (coke ovens)

Operator(s) and Period(s) of Operation Great Northern Gas Co. purified and
distributed gas in conjunction with production of gas by Algoma Steel Corporation
Ltd. (1925-1963)

3. Site Characteristics:

Size (when operated) Uncertain

Present Land Use Industrial, parking lot, gravel surface

Planned Land Use As is

Present Occupant(s) Algoma Steel Co. Ltd.

Present Land Use Adjoining Properties S, W & E industrial, N-some commercial &
residential

Underground Utilities Watermain; storm and sanitary sewers along Bonney & Goulais
Streets; concrete storm culvert under Goulais Street immediately north of Baseline
Avenue, appears to drain area immediately south of site, flows into E. Davignon
Creek

Soil Conditions Fill assumed

Site Access Uncontrolled

4. **Evidence of Buried Wastes:**

Operating Period 1925-1963 (38 years)

Excavation History No excavations reported; installation of watermain (1954), and sanitary sewers (1954)

Visible Wastes None reported

Odour None reported

Water Pollution None reported

5. **Resource Characteristics:**

Surface Water East and West Davignon Creeks

Proximity 100 m southeast and 200 m south, respectively

Use Recreational, storm drainage

Groundwater, Proximity Unknown

Use City water supply in conjunction with Lake Superior source
(Approximately 50% potable water from deep wells)

Proximity of Existing Wells Deep wells (City water) approximately 1.5 km N. of site. Confined bedrock aquifer.

Site Investigations None reported

6. **Comments/Remarks:** Limited information. Gas production by Algoma Steel, gas purification and distribution by Great Northern Gas Co. Site characteristics are for Great North Gas Co. property.

7. **Off-Site Disposal Areas:** No information on off-site disposal areas. Coal tar would have been produced and sold as a by-product or burned by Algoma Steel.

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. **Site Location:**

City Simcoe Street Address Southeast corner Pond and
Water Streets
MOE Region West Central
MOE District Hamilton NTS Map Sheet 40 I/16
Historical Maps Available 1906 gas main map (part of lease agreement between
Simcoe Gas and Water Co. Ltd. and the Dominion National Gas Co. Ltd.)

2. **Site Identification:**

Name Simcoe Gas Works
Type of Facility Coal gasification
Operator(s) and Period(s) of Operation Simcoe Gas and Water Co. Ltd. (1891-1910?)

3. **Site Characteristics:**

Size (when operated) Small
Present Land Use Institutional, public use, zoned open space
Planned Land Use As is - existing building protected under Ontario Heritage Act
Present Occupant(s) Town of Simcoe Information Centre, Senior Citizens Centre
Present Land Use Adjoining Properties N-vacant, E-parking lot, Lynn River,
S-Simcoe Seniors Centre, W-residences
Underground Utilities Sanitary and storm sewers along extension of Water Street
to Lynn River, storm sewers from parking lot to Lynn River, storm and sanitary
sewers and watermain along Water Street
Soil Conditions Unknown, fill assumed
Site Access Uncontrolled access

4. **Evidence of Buried Wastes:**

Operating Period 1891-1910? (19 years)

Excavation History Minor excavation (1986) below Senior Citizens Centre, no wastes observed

Visible Wastes None reported or observed

Odour Oily odour historically reported in office of Senior Citizens Centre.

Odour was pronounced enough to warrant excavation of fill below floor of office.

Open pipe discovered and filled with concrete

Water Pollution None reported or observed

5. **Resource Characteristics:**

Surface Water Lynn River

Proximity adjacent

Use Recreational

Groundwater, Proximity High water table

Use None in impacted area

Proximity of Existing Wells Water supply wells 3 km upstream on Lynn River

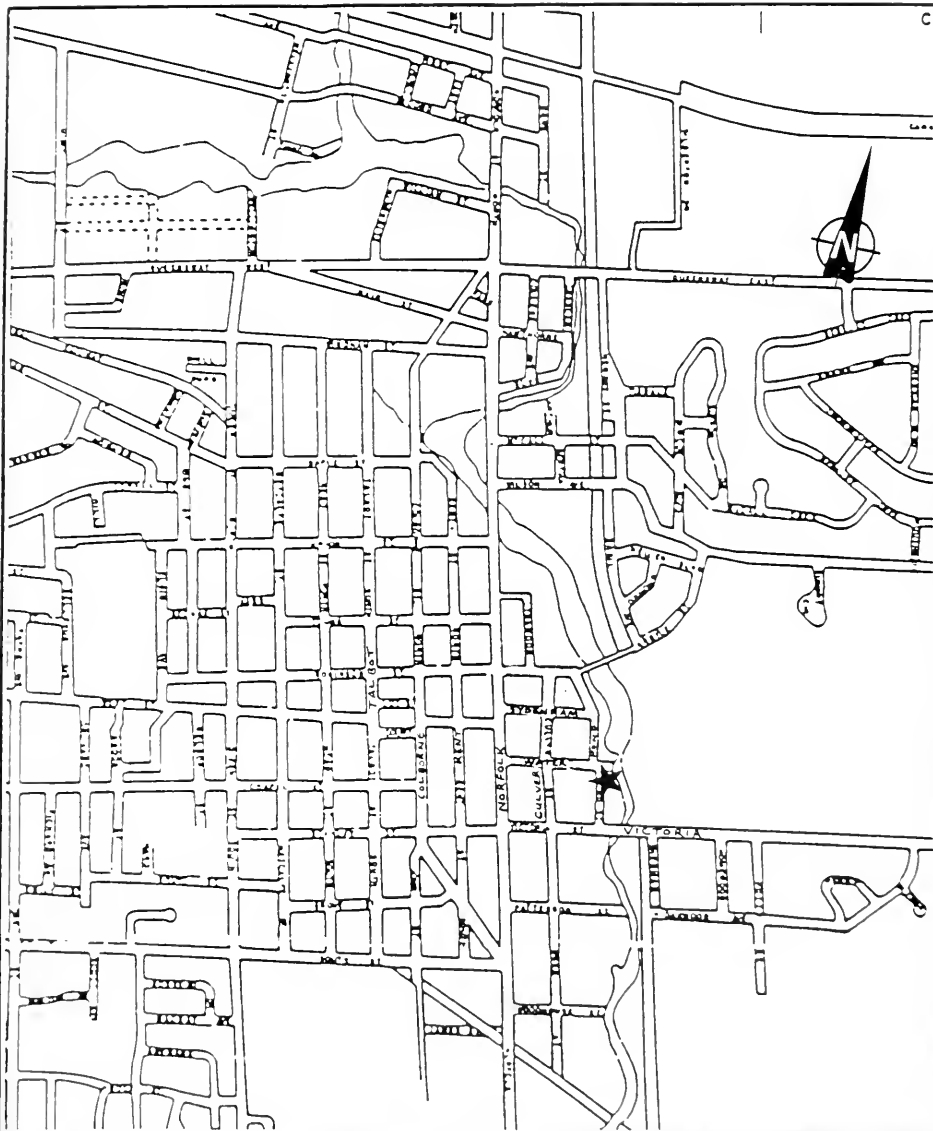
Site Investigations Unknown

6. **Comments/Remarks:** Original gas plant buildings in use today as Simcoe

Information Centre, gas holding tank likely on property of Senior Citizens Centre.

odours historically reported in Senior Citizens Centre may relate to former gas work

7. **Off-Site Disposal Areas:** Unknown



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Town of Simcoe, showing location
of former gas works.

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Water Street

Sydenham Street

Pond Street

Patterson's Creek



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1906 Plan of Simcoe Gas Works, (Source: Map contained in newspaper article, "No Reason for Alarm", The Simcoe Reformer, Simcoe, Ontario)

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Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Stratford Street Address Wellington Street, bounded by
St. Patrick, Nelson, St. David, Erie Streets
MOE Region Southwestern
MOE District London NTS Map Sheet 40 P/7
Historical Maps Available See attached

2. Site Identification:

Name Stratford Gas Works
Type of Facility Coal gasification (retort and water gas)
Operator(s) and Period(s) of Operation Stratford Gas Company (1875-1925),
Public Utility Commission (1925-1953)

3. Site Characteristics:

Size (when operated) Large, 1.2 hectares
Present Land Use Public Utilities Commission service centre (public
institutional)
Planned Land Use As is
Present Occupant(s) Public Utilities Commission service centre, office and
parking
Present Land Use Adjoining Properties N,S,W-residential, E-industrial
Underground Utilities Storm sewers and watermains along Wellington, St. David
and St. Patrick Streets
Soil Conditions Unknown, fill assumed
Site Access Controlled in buildings and uncontrolled in parking area

4. Evidence of Buried Wastes:

Operating Period 1879-1953, 74 years

Excavation History Main gas holder excavated for construction of PUC office (1955

Visible Wastes None reported or observed

Odour None reported or observed

Water Pollution None reported or observed

5. Resource Characteristics:

Surface Water Victoria Lake and Avon River

Proximity 600 m north

Use Recreational

Groundwater, Proximity PUC well on site - approximately 200 ft deep with top
100 ft cased

Use Drinking water, City of Stratford

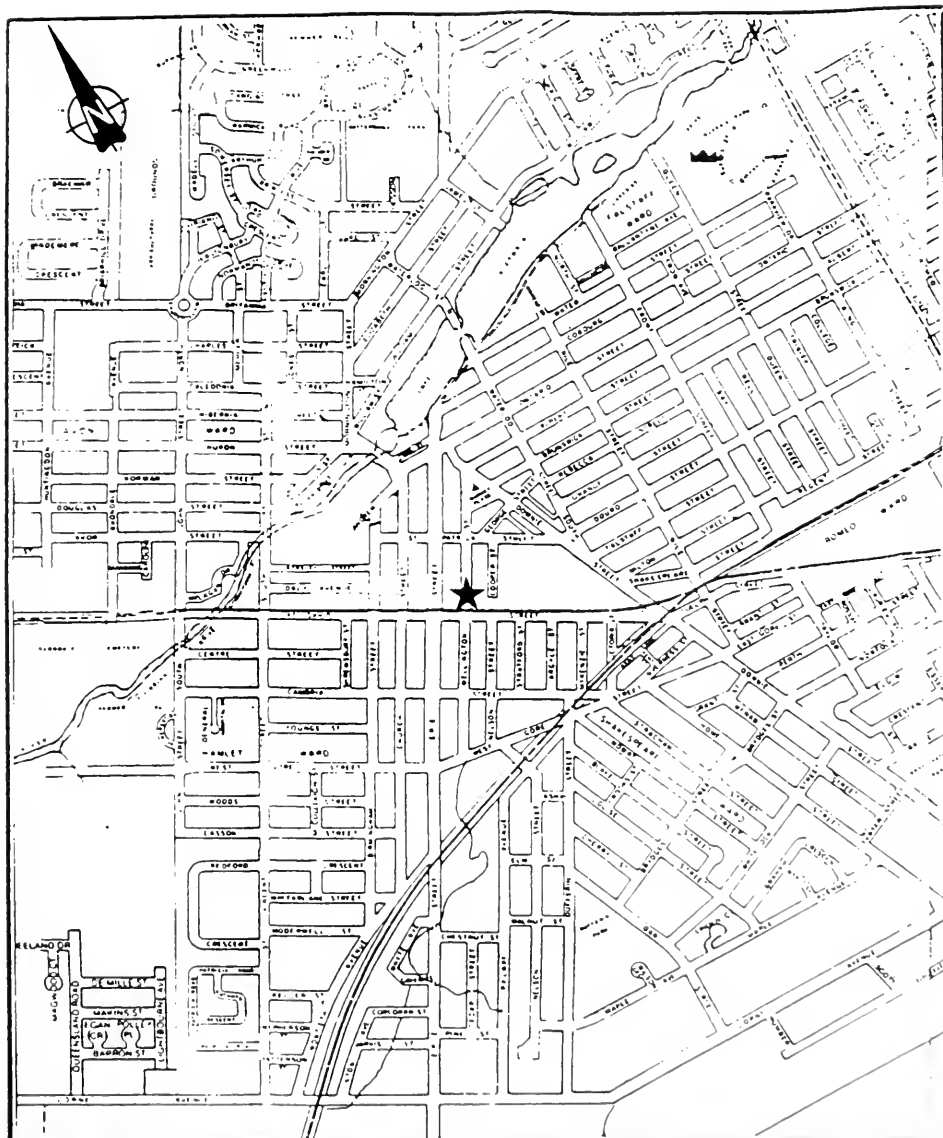
Proximity of Existing Wells On-site

Site Investigations None reported

6. Comments/Remarks: Present water supply is located on old gas plant property and
the tar wells are likely still in ground

7. Off-Site Disposal Areas: No information available

- 1913 - Revision of 1908 fire insurance map (Regional Collection, University of Western Ontario), sheet 6 and 7
- 1928 - Revision of 1908 fire insurance map (Public Archives Canada, NMC 9719, key 1/33, sheet 4/33)
- 1949 - Fire insurance plan (Public Archives Canada, NMC 9720, sheet 21/30)



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City of Stratford, showing location
of former gas works.

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Evidence of Buried Wastes:

Operating Period 1841-1954, 103 years

Excavation History Metro Toronto Library (SE corner - Parliament and Front) 1986 tars encountered, several other excavations have occurred in the area with no reference to tar.

Visible Wastes Coal tar contamination discovered during excavations and subsequent investigations for Metro Toronto Library site and 26 Berkeley Street site. Several underground tanks with PAH and phenol contents discovered at 26 Berkeley site, Coal tar observed in sub basement of Toronto Free Theatre (26 Berkeley Street)

Odour Strong tar odours in the basement of Canadian Opera Company; air sampling in in December 1986 showed PAHs present, but reported to be stronger in summer and distinct throughout block.

Water Pollution Water contamination seen during excavations and investigations at Metro Toronto Library site and at 26 Berkeley Street site. PAHs present in waters sampled at 26 Berkeley Street.

Resource Characteristics:

Surface Water Lake Ontario

Proximity 200 m south

Use Recreational, industrial

Groundwater, Proximity Less than 2.5 m below ground surface

Use None

Proximity of Existing Wells None reported in area

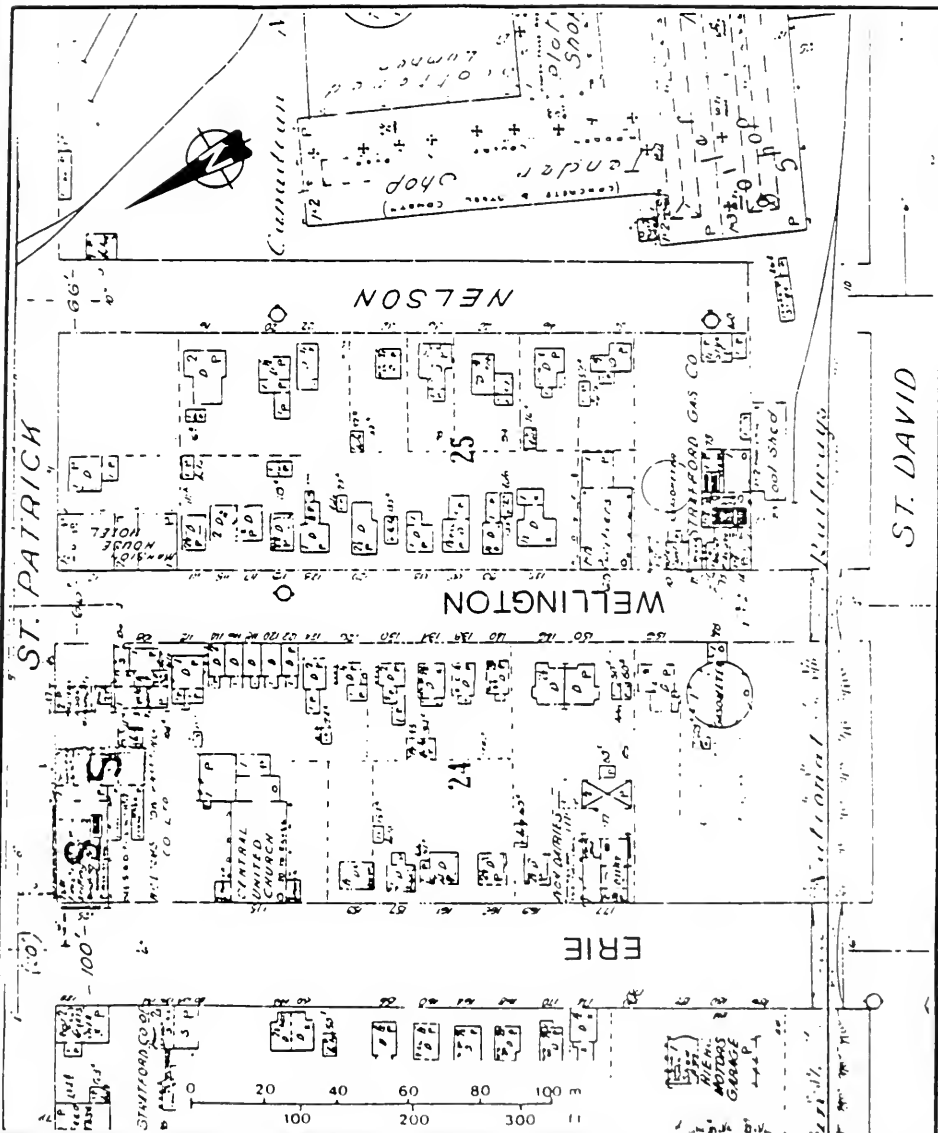
Site Investigations Boreholes for Toronto Harbour Commission, boreholes for City of Toronto at Esplanade-Sherbrooke-Berkeley site area, Metro Toronto Library site investigation (1986) and borings for study at 26 Berkeley Street site.

Comments/Remarks: This site also includes the Princess Street site. Underground tar and ammonia lines connect various operations on site and under Front Street to Station B plant.

Off-Site Disposal Areas: The tar was sold to contractors and removed by barrels, train tankers and pipelines. In 1927 some of the waste water containing light oils and tars was discharged to Lake Ontario. Disposal site of excavated material from Library site to Maple Landfill in Keele valley.

Historical Maps Available:

- 1851 - J. Stoughton Dennis, surveyor; drawn and compiled by Sandford Fleming, Topographical Plan of the City of Toronto, 1851 (Public Archives Canada, NMC 44116), blow up
- 1859 - Portion of a plan of the Grand Trunk railroad (Public Archives Canada, NMC 16924), blow up 1884 - R.L. Polk and Son, Map of the City of Toronto,
- 1884 (Public Archives Canada, NMC 19808), blow up
- 1889 - Plan of the works of the Consumers Gas Company, DWG No. 8.23, September, 3 maps (Consumer Gas Co.)
- 1909 - Fire insurance plan (Public Archives Canada, NMC 31775) sheet 10
- 1918 - Revisions to 1909 fire insurance plan (Public Archives Canada, NMC 13996), sheets 9 and 10)
- 1955 - Plan of works, Station A (Consumers Gas Company, Toronto)
- Plus - Many other Public Archives maps.



Drawn by	Date
Checked by	Date
Revisions	Date

1949 Plan of Stratford Gas Works, (Source: Fire insurance plan, Public Archives Canada, NMC-9720, 21/30)

INTERA Technologies

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Locations:

City Toronto Street Address Station A, 271 Front Street.
area of Princess, Berkeley, Front, Parliament and
Trinity Streets

MOE Region Central

MOE District Toronto NTS Map Sheet 30 M/11

Historical Maps Available See attached

2. Site Identification:

Name Toronto Station A Gas Works

Type of Facility Retort coal gasification and carburetted water gas

Operator(s) and Period(s) of Operation Princess Avenue site (1841) bought by
Consumers Gas Company (1844) originally operated by Toronto Gas Light and Water
Commission, incorporated into Front Street site (1848), and closed (1855),
Consumers Gas Company "Front Street" (1848-1954)

3. Site Characteristics:

Size (when operated) Very large, 6 hectares

Present Land Use Industrial, commercial, institutional, parking

Planned Land Use Parts of the site are currently planned for redevelopment

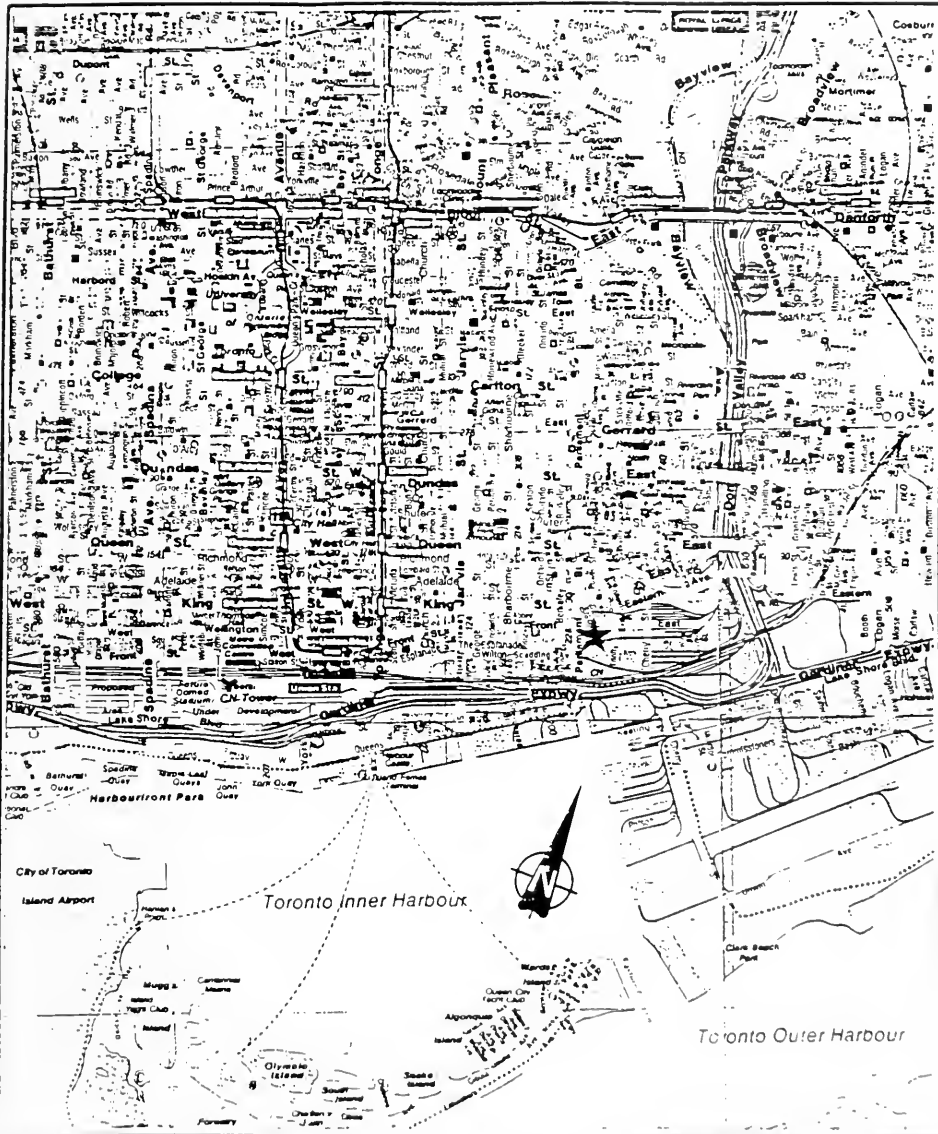
Present Occupant(s) Canada Post Co. (Princess Street), Canadian Opera Co.
Greenspoon Brothers Ltd., Toronto Free Theatre, Torstar Publishers Ltd., Toronto
Transportation Commission, Bresler Realty Ltd. (Gas Station), Rummymede
Investment Co., Parking Authority of Toronto, Ontario Ltd., Consumers Gas Co.,
Plashkes and Zitney Ltd., Fuhiman Autobody Ltd., 565910, 593586, 640836 Ontario
Ltd. (car dealership)

Present Land Use Adjoining Properties N-Toronto Sun Anglican Church and
industrial and commercial, E-Old York Car Sales, CBC, Excise Warehouse, S-Hiram
Walkers bulk storage, W-industrial, commercial, Public School Annex and Commercial
Centre, High rise residential

Underground Utilities Storm and sanitary sewers, and gas and water mains
along all bounding blocks.

Soil Conditions Fill overlying thick sequence of clay and sand

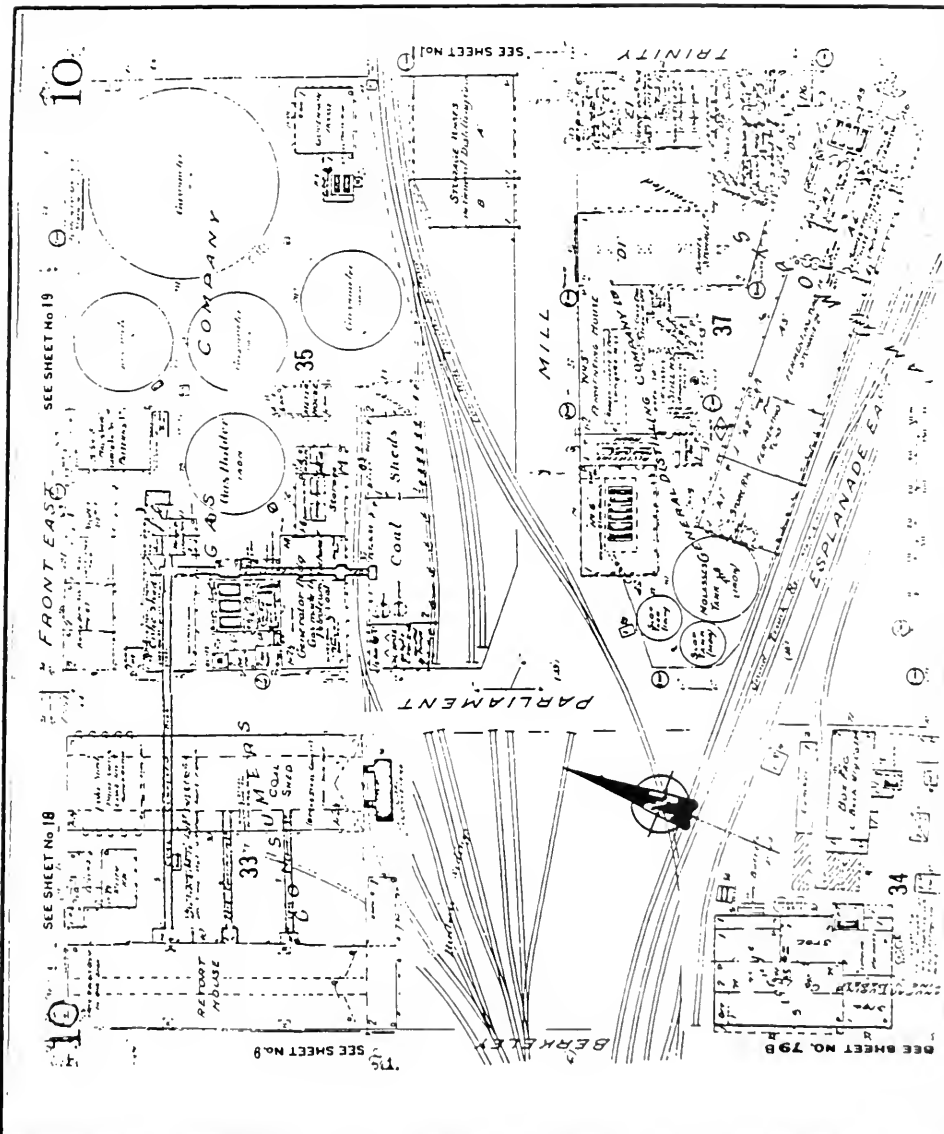
Site Access Controlled to uncontrolled



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Revisions	Date

City of Toronto, showing location of former gas works (Station "A", Front St. E.)

INTERA Technologies



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Revisions	Date
INTERA Technologies	

1909 Plan of Toronto Gas Works (Station "A", Part 1, (Source: Fire insurance plan, Public Archives Canada, NMC-31775, sheet 10)

Historical Maps Available

Site 3

- 1909 Fire insurance plan (Public Archives Canada, NMC 13996), Sheet 19 appears on 1918 revised plan, but plan sheet is dated 1909, Sheet 66
- 1912 Revisions of 1910 fire insurance plan (Public Archives Canada, NMC 9948), Sheet 19
- 1918 Revisions to 1909 fire insurance plan (Public Archives Canada, NMC 13996), Sheet 19

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Toronto Street Address 28 Bathurst Street, bounding
blocks Bathurst Street/Niagara Street
Tecumseh Street/Grand Trunk Railway

MOE Region Central

MOE District Toronto NTS Map Sheet 30 M/11

Historical Maps Available see attached sheet

2. Site Identification:

Name Toronto Station "C" Gas Works

Type of Facility Above ground storage, no production

Operator(s) and Period(s) of Operation Consumers Gas Co. (1909-1954)

3. Site Characteristics:

Size (when operated) 2.4 hectares

Present Land Use Industrial

Planned Land Use As is

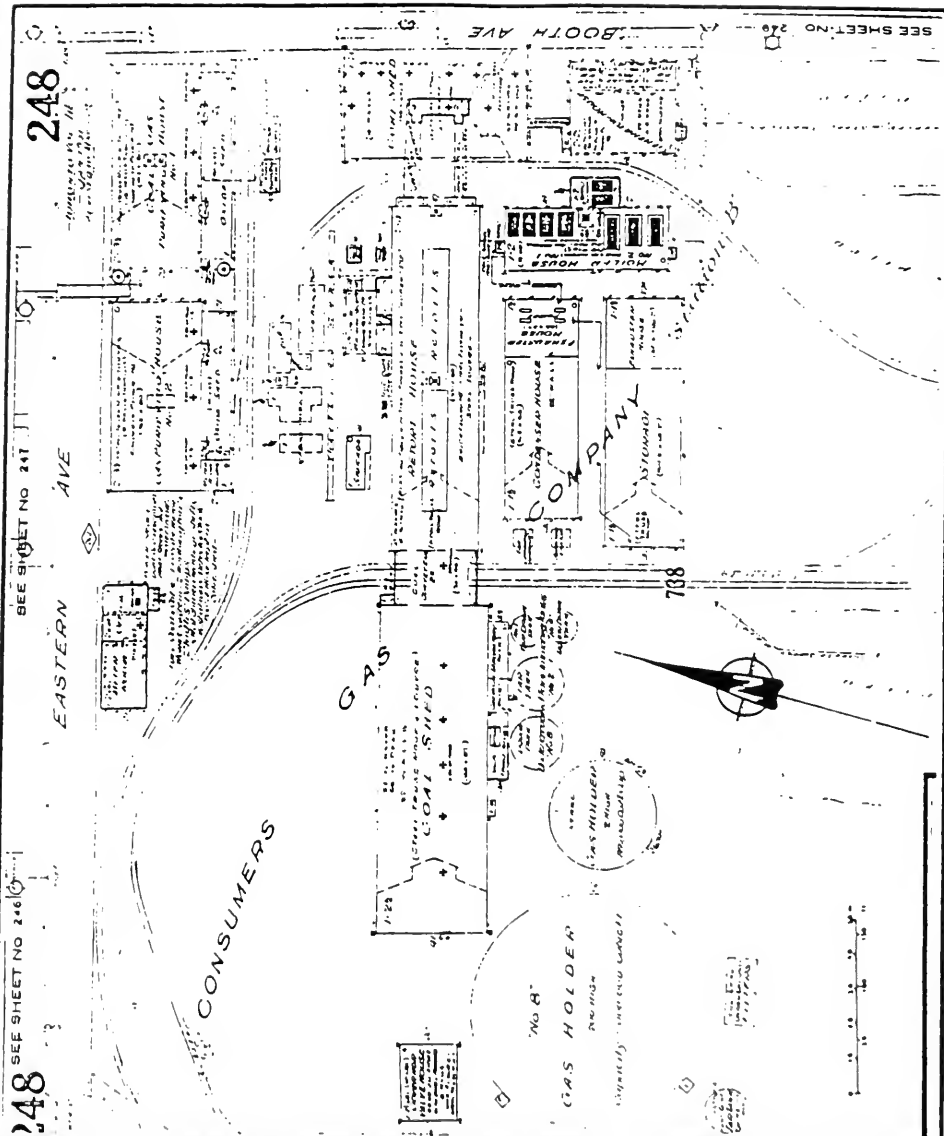
Present Occupant(s) Toronto Refiners and Smelters Ltd.

Present Land Use Adjoining Properties N-residential, E-commercial, W-commercial,
S-railway

Underground Utilities Storm & sanitary sewers, Bell Canada and Ontario Hydro
Lines, gas & water mains along Bathurst Street, Niagara Street and Tecumseh Street.
TTC services along Bathurst Street

Soil Conditions Fill (0-1 m), mud & sand or clay (1-4 m), shale (4 m)

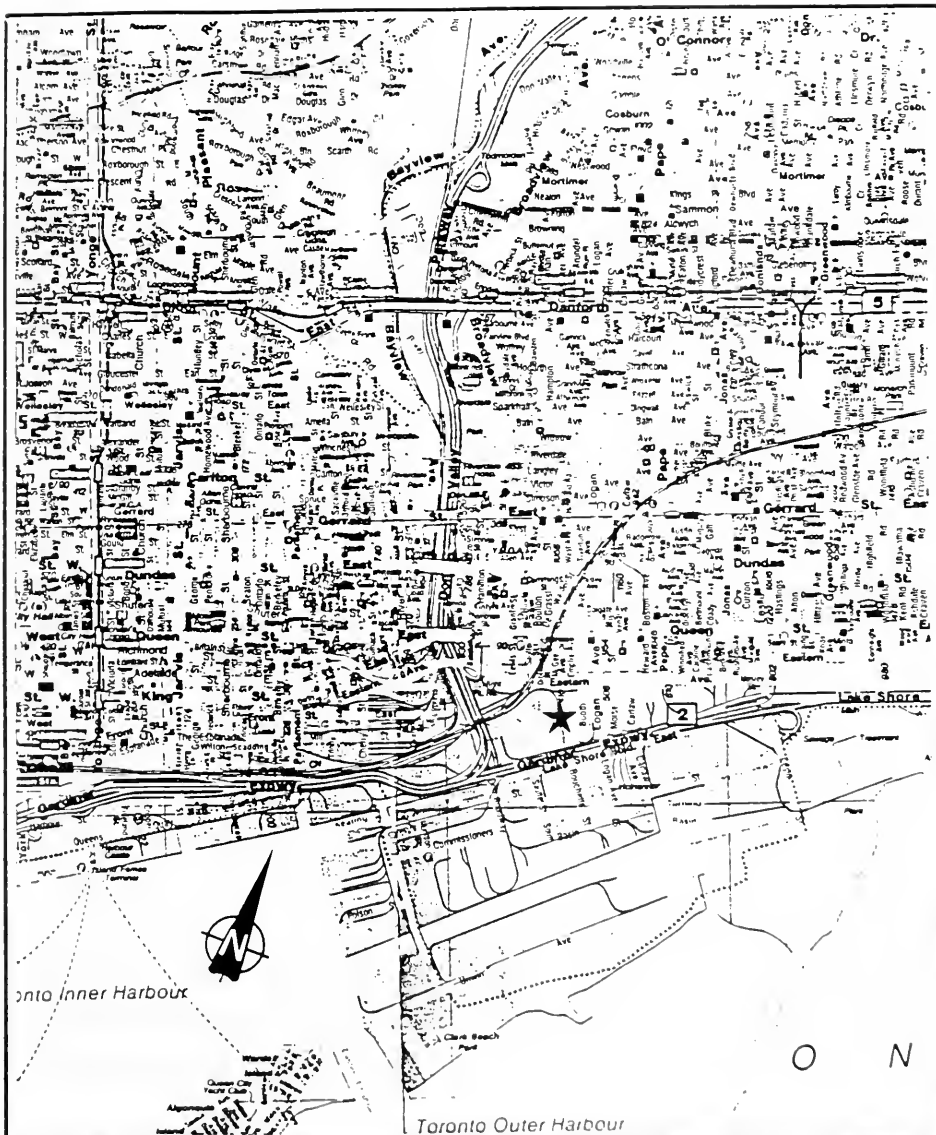
Site Access Controlled by a fence



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Revisions	Date

1935 Plan of Toronto Gas Works (Station "3"),
(Source: Fire insurance plan, Public Archives
Canada, NMC-13999, sheet 248)

INTER Technologies



Drawn by	Date
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Revisions	Date

City of Toronto, showing location of former gas works (Station "B", Eastern Ave.)

INTERA Technologies

4. **Evidence of Buried Wastes:**

Operating Period 1909-1954 (45 years)

Excavation History Redevelopment from 1962 to present. Buildings are limited to surface foundations

Visible Wastes 100,000 gal of waste on-site in tank (1977) and still present in 1979. Oil stained sand at depth of 2.5 m was encountered during inspection of footings (1979)

Odour None reported or observed

Water Pollution None reported but most likely based on observation of oil in soil

5. **Resource Characteristics:**

Surface Water Don River, Ashbridges Bay

Proximity 200 m west and 200 m south, respectively

Use Industrial/recreational/water supply

Groundwater, Proximity 1 to 2 m below ground surface

Use Not used

Proximity of Existing Wells None reported in area

Site Investigations Soil investigation for redevelopment (1962); soil test borings (1978), investigation into removal of up to 100,000 gallons of oil-tar substance stored in a tank on-site (1977). Inspection of footing excavations for Eastern and Booth Works Yard (1979)

6. **Comments/Remarks:** During plant operation the tar was bought by Dominion Tar and Chemical, adjacent to the plant

7. **Off-Site Disposal Areas:** Disposal sites for excavated material and liquid tar are not known

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Toronto Street Address 415 Eastern Avenue, northeast
MOE Region Central corner of Booth Street and Eastern Avenue
MOE District Toronto NTS Map Sheet 30 M/11
Historical Maps Available 1912 - Revisions of 1910 fire insurance plan
(Public Archives Canada, NMC 9948, Sheet 30/47); 1935 - Revisions to 1931 fire
insurance plan (Public Archives Canada, NMC 13999), Sheet 248

2. Site Identification:

Name Toronto Station B Gas Works
Type of Facility Coal Gasification
Operator(s) and Period(s) of Operation Consumers Gas Co. (1909-1954)

3. Site Characteristics:

Size (when operated) Large 14 hectares
Present Land Use Public (City of Toronto Parks, Public Works, Purchasing)
Planned Land Use Some redevelopment possible
Present Occupant(s) Consumers Gas Co., Lever Brothers Ltd., Old County Coal
Lot Inc., The Corporation of the City of Toronto, Booth Avenue Hospital, Laundry
Inc., Canadian National Railways Ltd., George Weston Ltd., Loblaw's Ltd.
Present Land Use Adjoining Properties N-residential, S,E,&W-mixture of
industrial & commercial
Underground Utilities Storm & sanitary sewers, Bell Canada lines, gas and water
mains along Booth St., Mill Street, & Eastern Avenue; abandoned ammonia & gas
lines along Eastern Avenue and running into site
Soil Conditions Variable depth of fill material on top of clay, silt layers to
bedrock. Depth to bedrock varies from 10 m in the north to 14 m in the south
Site Access Controlled for most of site





Gooderham

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C A R O L I N E

Mess Lyman Brothers & Snarr

Gas Comp? leased to D. Crawford

P R I N C E S S

Wm & Stram Kenrick

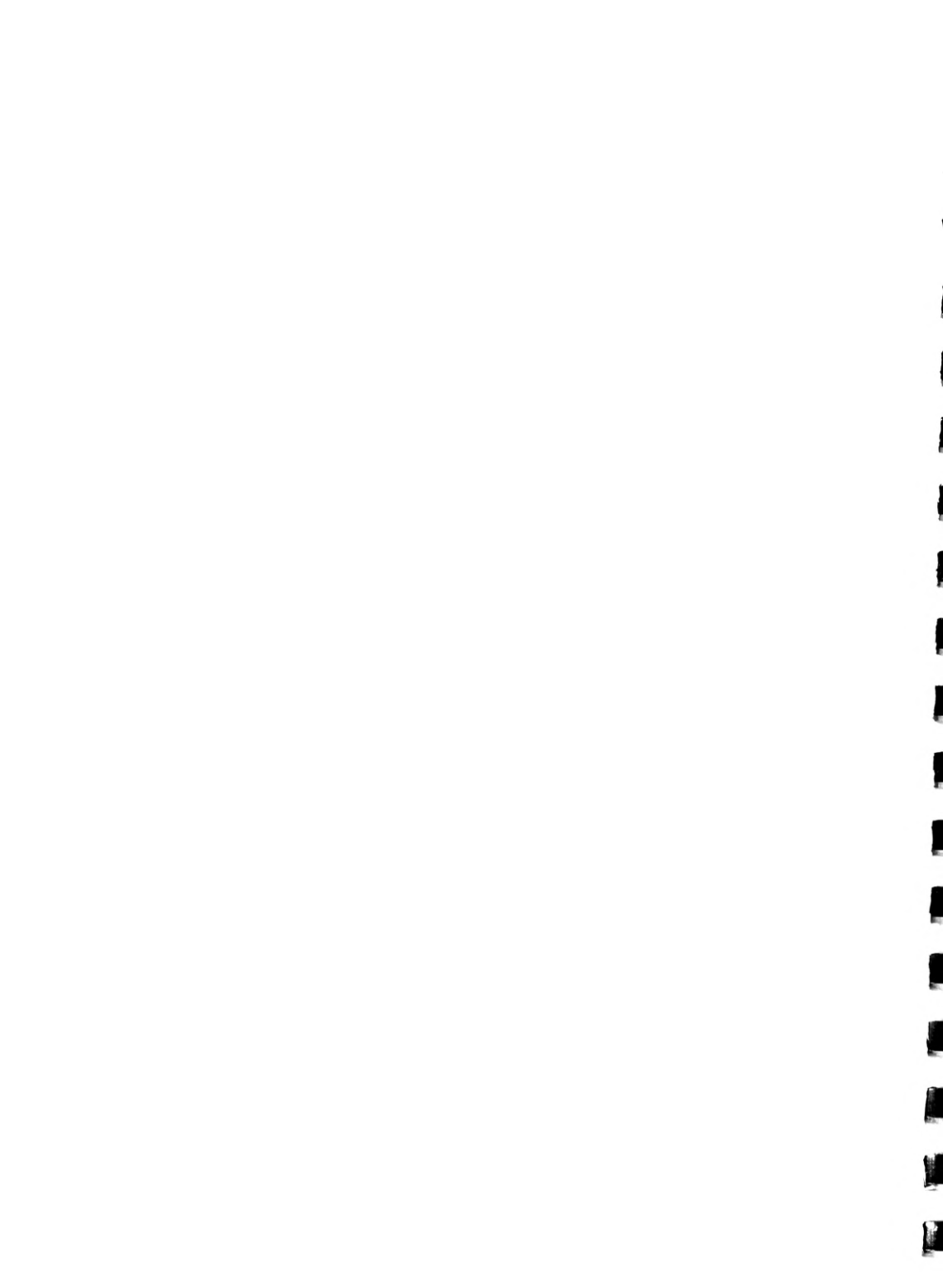
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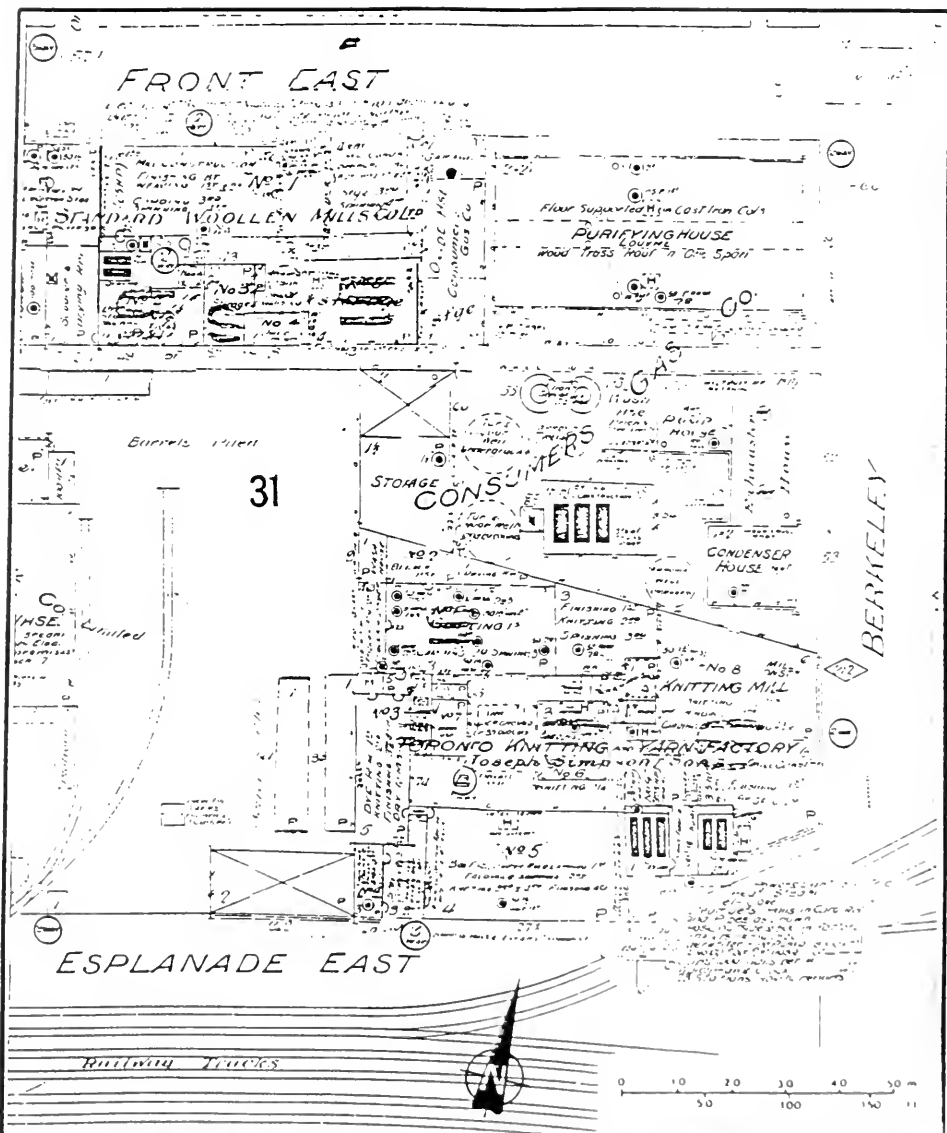
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1859 Plan of Princess St. part of Toronto
Gas Works (Station "A"), (Source: Public
Archives Canada, NMC-16924,4/5)

INTERA Technologies





Drawn by	Date	1918 Plan of Toronto Gas Works (Station "A", Part 2, (Source" Fire insurance plan, Public Archives Canada, NMC-13996, sheets 9, 10)
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Revisions	Date	
INTERA Technologies.		

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

City Waterloo Street Address Regina Street, east side of
Regina Street bounded by William Street and
Laurel Creek

MOE Region West Central

MOE District Cambridge NTS Map Sheet 40 P/7

Historical Maps Available 1894 Bird's eye view (Public Archives Canada,
NMC 17738), blow up; 1913 Revision of 1908 fire insurance plan (Regional
Collection, University of Western Ontario), sheet 7; 1946 Revision of 1920 fire
insurance plan (Public Archives Canada), NMC 9761), 7/18

2. Site Identification:

Name Waterloo Gas Works

Type of Facility Retort coal gas and carbureted water gas

Operator(s) and Period(s) of Operation Waterloo Gas Company (1889-1947), Public
Utilities Commission (1947-1957)

3. Site Characteristics:

Size (when operated) Medium, 0.6 hectares

Present Land Use New City Hall under construction

Planned Land Use Further development and channelization project for
Laurel Creek

Present Occupant(s) New City Hall of Waterloo

Present Land Use Adjoining Properties N-CN rail lines, E-commercial, S-Public
Utilities Commission Water Works, W-residential and Waterloo Town Square

Underground Utilities Storm sewer along Regina Street, Herbert Street and
William Street

Soil Conditions Fill (0-2 m), sand/silt/gravel (2-5 m), clay and silt (5 m) below
ground surface

Site Access Uncontrolled

4. **Evidence of Buried Wastes:**

Operating Period 1876 to 1919 ? (43 years)

Excavation History Tar first noticed in excavation for watermain on Young Street

Visible Wastes Concrete blocks from building demolition show tar stains and residue

Odour Minor odours on-site and strong odours in sanitary sewer and in groundwater monitoring wells installed by consultant conducting site assessment

Water Pollution Strong odours in wells indicate groundwater contamination, no evidence of surface water contamination

5. **Resource Characteristics:**

Surface Water Cedar Creek, Thames River

Proximity 0.75 km southwest and 2 km west, respectively

Use Industrial, recreation

Groundwater, Proximity High water table

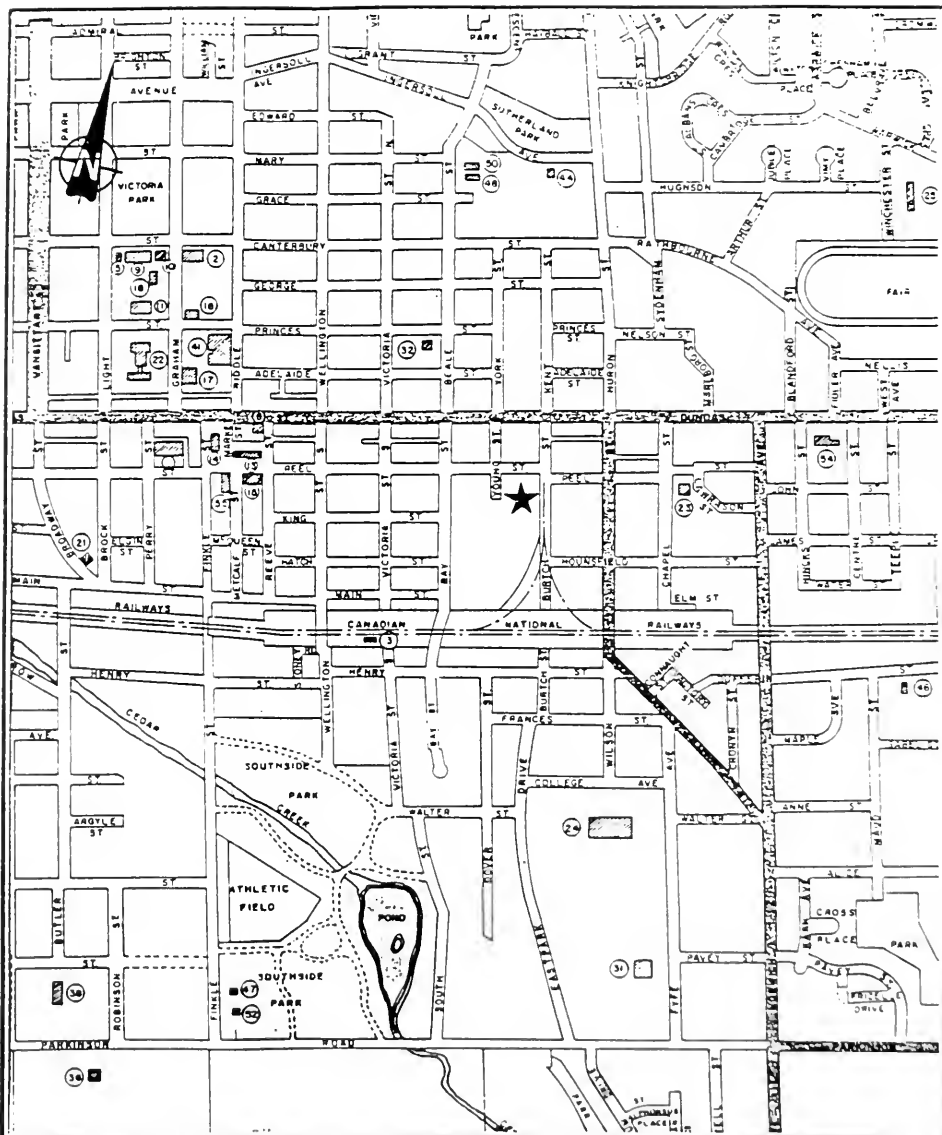
Use Seasonal water supply

Proximity of Existing Wells Several wells make up town water supply. In town, wells are located 600 m north at Ingersoll Avenue & Huron Street and 900 m south at the south end of Victoria (used very little). Out of town wells supply major source. Wells located approx. 5 km from town supply the majority of Town water

Site Investigations Consultant retained to undertake site assessment (study ongoing)

6. **Comments/Remarks:** Development in the area has been postponed until the completion on the consultant's site assessment study

7. **Off-Site Disposal Areas:** No known off-site disposal areas. Some on-site disposal of coal waste (clinkers) was evident from consultant's investigation. There was, however, an old dump by the railroad tracks at the south end of Burtch Street. It closed sometime around 1920 and may have received some waste.



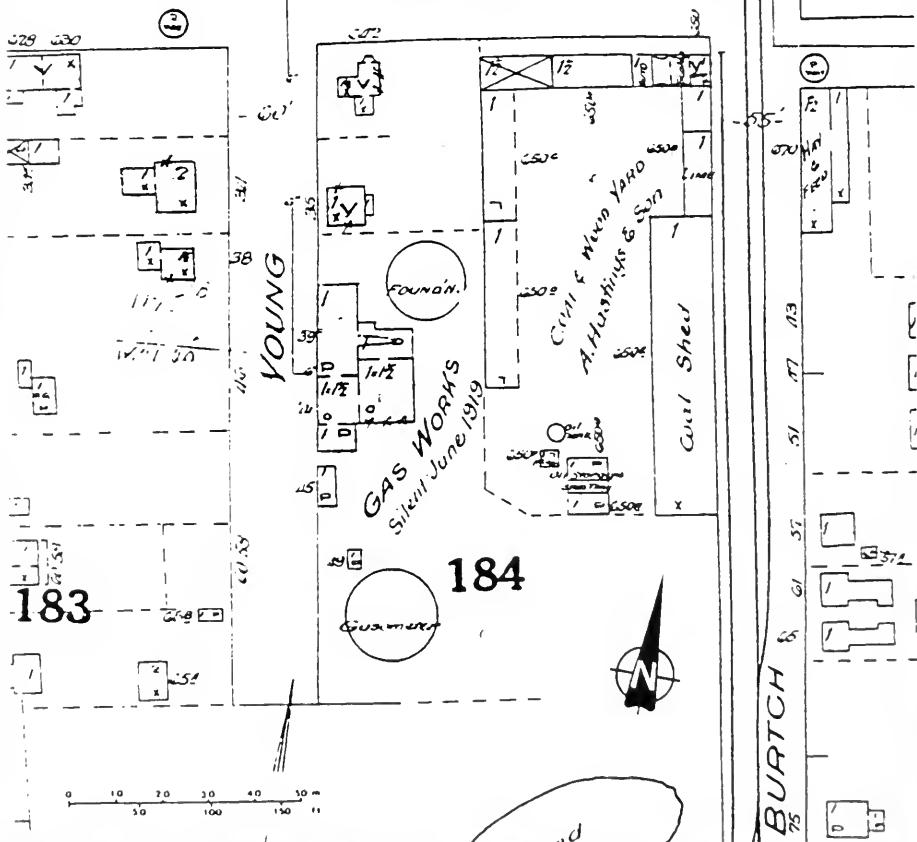
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City of Woodstock, showing location
of former gas works.

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Revisions	Date

1919 Plan of Woodstock Gas Works, (Source" Fire insurance plan, Regional Collection, University of Western Ontario, sheet 22)

INTERA Technologies

Historical Maps Available

- 1876 Map produced by Walker and Miles, 1876, reproduced in Oxford and Brant County Atlas (1975), p. 28 (University of Western Ontario)
- 1913 Revision of 1899 fire insurance plan (Regional Collection, University of Western Ontario), key only.
- 1919 Revision to 1899 fire insurance plan (Regional Collection, University of Western Ontario), Sheet 22.
- 1928 Fire insurance plan (Regional Collection, University of Western Ontario), Sheet 22.
- 1949 Revision of 1913 fire insurance plan (Regional Collection, University of Western Ontario), Sheet 22.

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

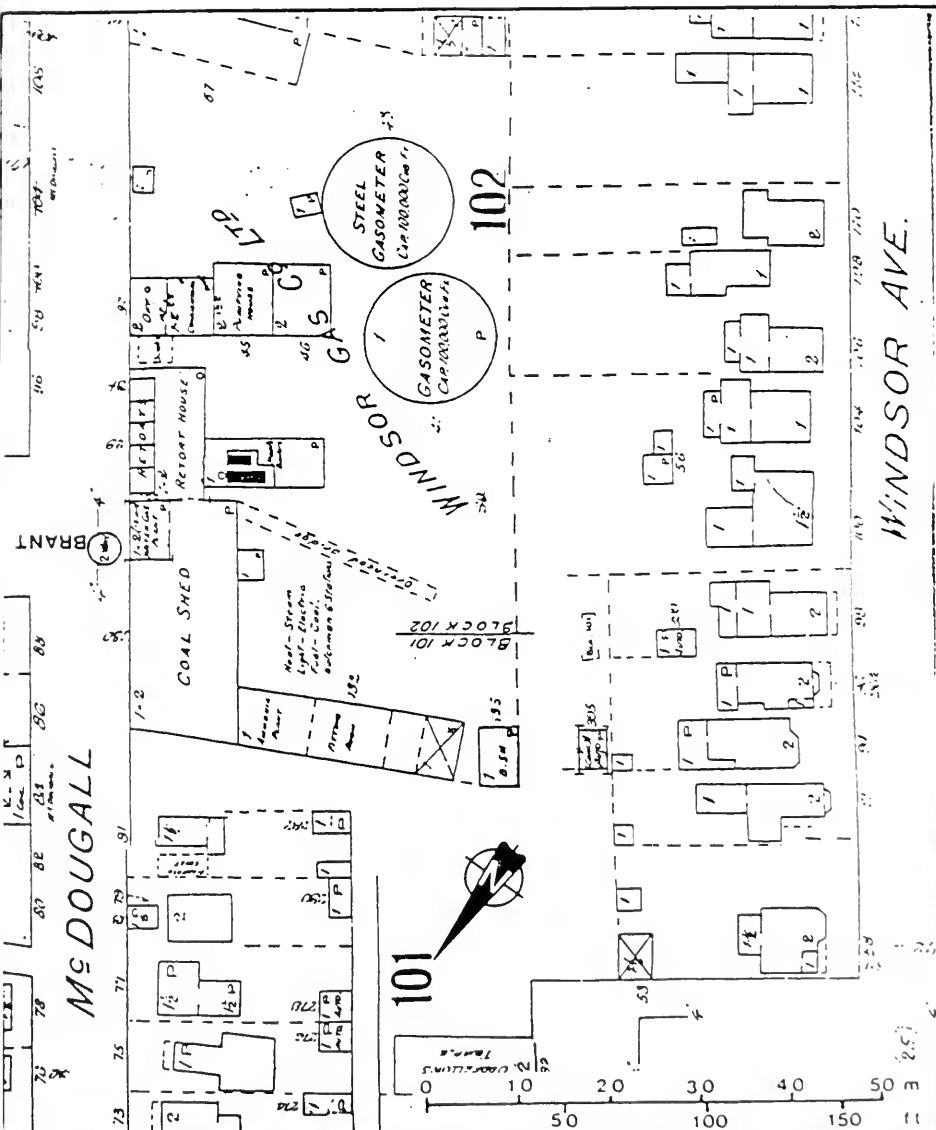
City Woodstock Street Address Young Street bounded by Young,
MOE Region Southwestern Peel, Burtch Sts. and open area
MOE District London NTS Map Sheet 40 P/2
Historical Maps Available See attached sheet

2. Site Identification:

Name Woodstock Gas Works
Type of Facility Coal Gasification
Operator(s) and Period(s) of Operation Woodstock Gas Light Co. (1875-1919?)

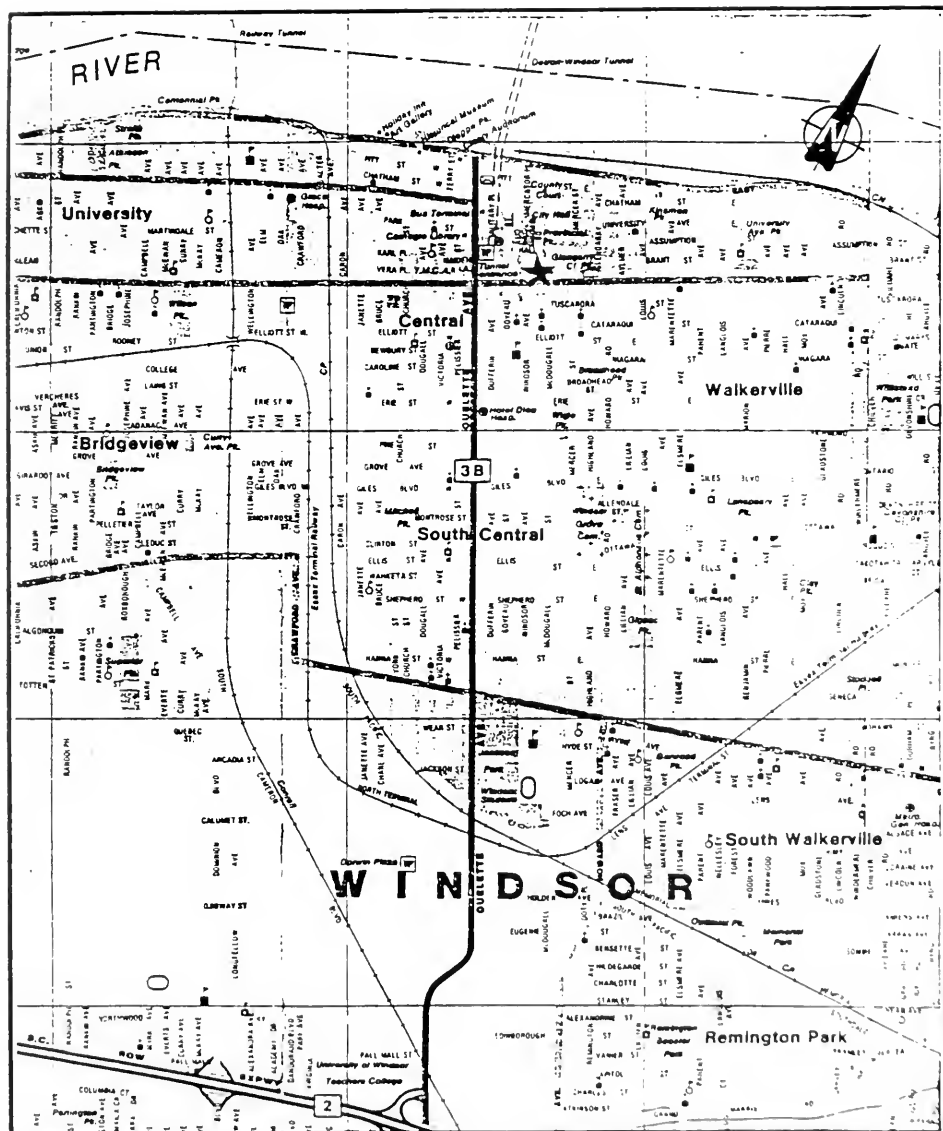
3. Site Characteristics:

Size (when operated) Small 0.4 hectares
Present Land Use Residential, commercial
Planned Land Use Townhouse complex & proposed Main and Young Street
extensions
Present Occupant(s) McKerlie Automotive, Union Gas Co., Reeves Realty Co.
(developer)
Present Land Use Adjoining Properties N-commercial, E-residential, S-CN railway
line, W-residential (townhouses)
Underground Utilities Storm & sanitary sewers, and watermain along Young Street,
sanitary sewer along proposed Main Street extension
Soil Conditions Unknown, fill assumed
Site Access Uncontrolled



1917 Plan of Windsor Gas Works, (Source"
Fire insurance plan, Regional Collection,
University of Western Ontario, sheet 7)

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Revisions	Date



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Revisions	Date

City of Windsor, showing location
of former gas works.

INTERA Technologies

- 1878 - Bird's eye view (Public Archives Canada, NMC 4961), blow up
- 1917 - Revision of 1913 fire insurance map (Regional Collection, University of Western Ontario), sheet 7
- 1919 - Revision of 1913 fire insurance map (Regional Collection, University of Western Ontario), sheet 7
- 1924 - Revision of 1920 fire insurance map (Regional Collection, University of Western Ontario), sheet 7
- 1952 - Fire insurance map (Public Archives Canada), sheet 7

Evidence of Buried Wastes:

Operating Period 1871-1930, 59 years

Excavation History Some wastes removed from site likely during site demolition -

Wastes reported buried at site by resident of Windsor

Visible Wastes None

Odour Faint intermittent odour in storm manhole in parking lot

Water Pollution None reported or observed. City outlawed dumping of plant wastes
into McDougall sewer in 1888

Resource Characteristics:

Surface Water Detroit River

Proximity 500 m north

Use Industrial, recreational (water supply intake is 4 km upstream)

Groundwater, Proximity Unknown

Use None

Proximity of Existing Wells No known wells in area

Site Investigations None known

Comments/Remarks: Resident of Windsor indicated that some waste had been removed
from site to an unknown location and that some waste still remained on site.

Off-Site Disposal Areas: Unknown

Fact Sheet for Survey of Coal Gasification Plant Waste Sites

1. Site Location:

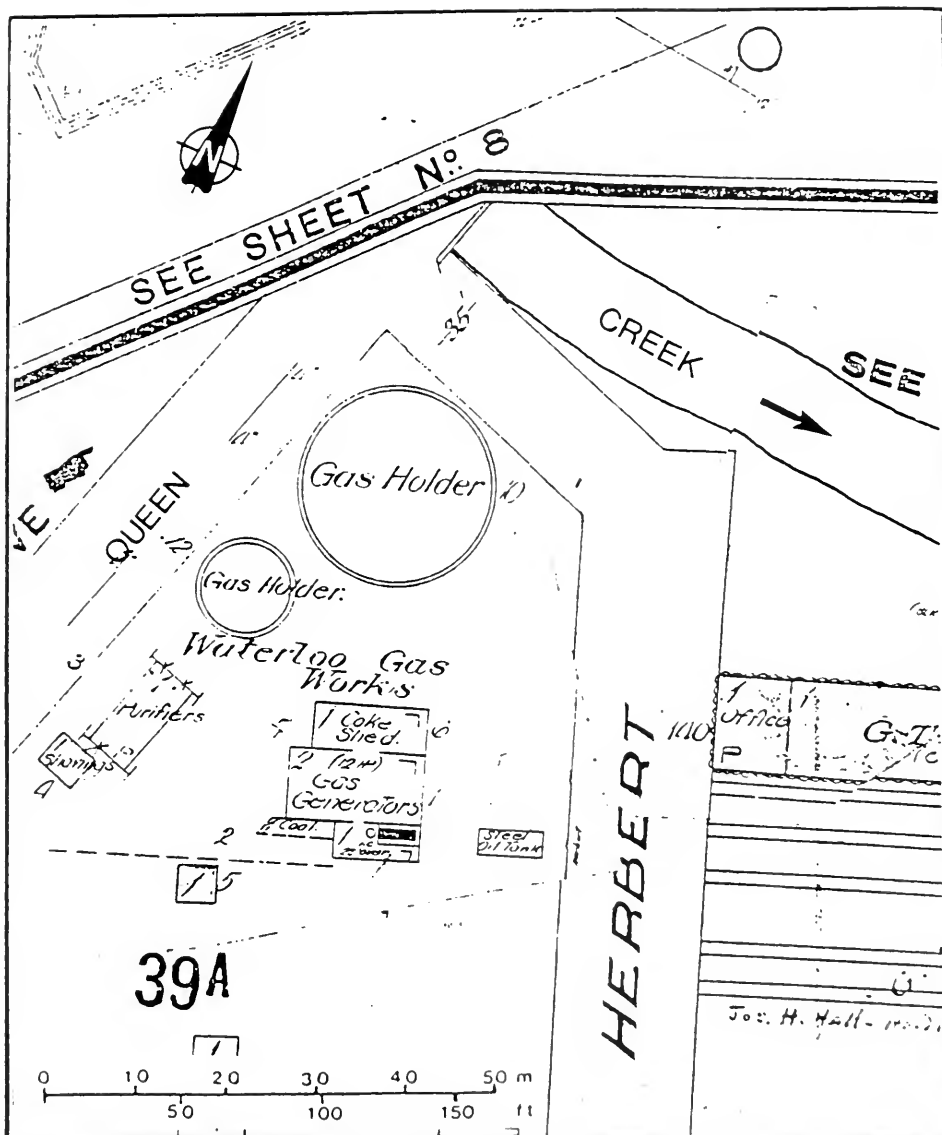
City Windsor Street Address South of McDougall Avenue
opposite to the southwesterly extension of
Brant Street
MOE Region Southwestern
MOE District Windsor NTS Map Sheet 40 J/6
Historical Maps Available See attached

2. Site Identification:

Name Windsor Gas Works
Type of Facility Retort coal gasification
Operator(s) and Period(s) of Operation Windsor Gas Company (1871-1930)

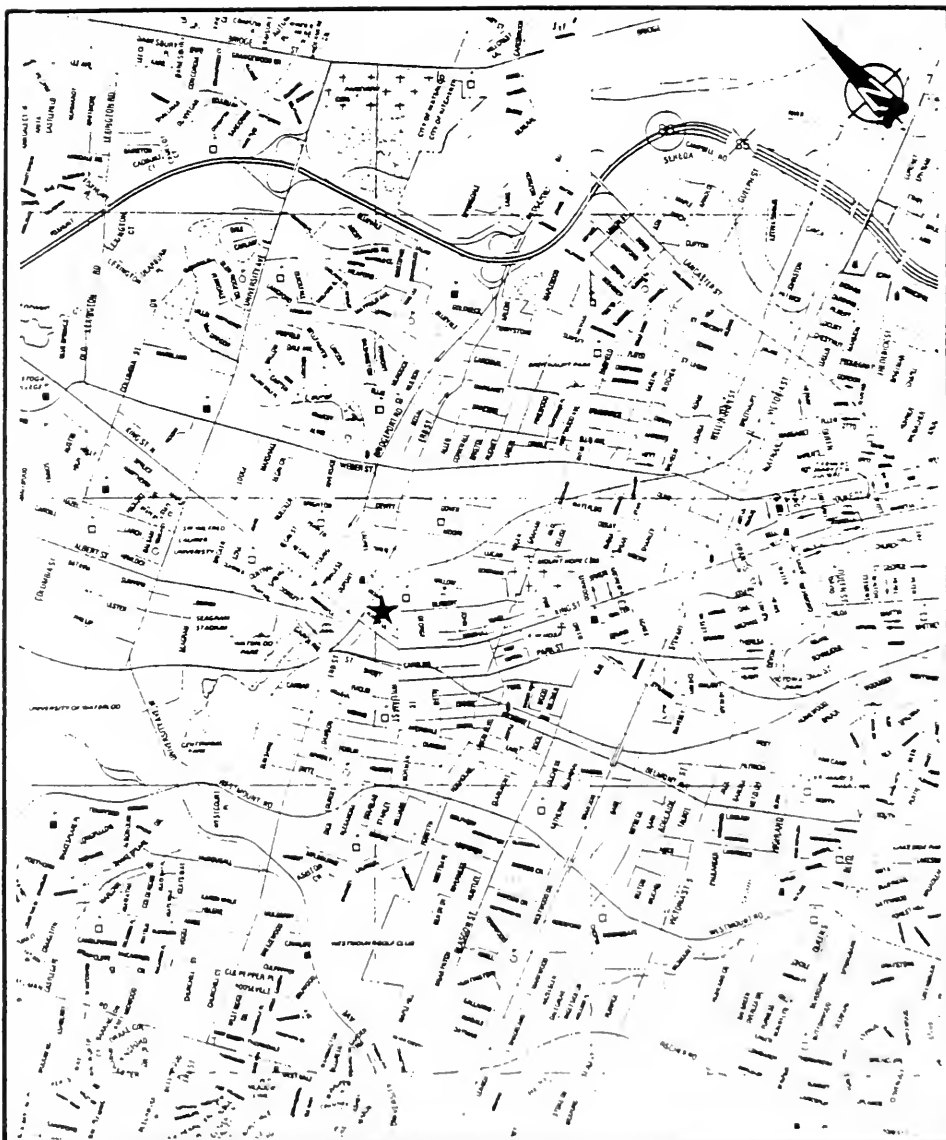
3. Site Characteristics:

Size (when operated) Medium, 0.5 hectares
Present Land Use Public parking, recreation
Planned Land Use As is
Present Occupant(s) City of Windsor
Present Land Use Adjoining Properties N-City Hall, E&W-residential,
S-commercial
Underground Utilities Storm sewers in the parking lot, Storm and sanitary sewers,
and watermain along McDougall Avenue.
Soil Conditions Fill assumed
Site Access Uncontrolled



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1908 Plan of Waterloo Gas Works, (Source: Fire insurance plan, Regional Collection, University of Western Ontario, sheet 7)



Drawn by	Date
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Revisions	Date

City of Waterloo, showing location of
former gas works.

INTERA Technologies

4. Evidence of Buried Wastes:

Operating Period 1889-1957, 68 years

Excavation History New City Hall presently under construction

Visible Wastes Observed during excavation of building footings (1986), observed during drilling investigation (1986)

Odour Noted during site visit

Water Pollution Sheen noted on surface water (1987), history of tar in Laurel Creek (1925), creek sediments sampled and high PAH levels found (1986)

5. Resource Characteristics:

Surface Water Laurel Creek

Proximity 10 m north

Use Recreation

Groundwater, Proximity Perched water table (3 m) near Laurel Creek and 9 m below ground surface towards William Street

Use Water supply for City of Waterloo

Proximity of Existing Wells Less than 50 m. south across William Street

Site Investigations Site investigations both on and off-site completed (1987)

6. Comments/Remarks: Contamination has been identified, with some contaminated soil and water/tar liquid removed and further remedial work underway.

7. Off-Site Disposal Areas: Laurel Creek may have received some wastes. During plant demolition between 27,000 L and 100,000 L of liquid tar were removed and dumped around the area now occupied by the intersection of University Avenue and CAH 86 (Conestoga Parkway?)

